CHAPTER 33

LIST OF EFFECTIVE TEMPORARY REVISIONS

FOLLOWING IS A COMPLETE LISTING OF ALL ACTIVE TEMPORARY REVISIONS (TR'S). TR'S NOT LISTED SHOULD BE REMOVED. THE ATA NUMBER, CONFIG CODE AND PAGE NUMBER IDENTIFIES THE PAGE PRECEDING THE TR.

TR NUMBER	ATA NUMBER	CONFIG CODE	PAGE NUMBER	TR DATE
NONE				

CHAPTER 33

LIGHTS

LIST OF EFFECTIVE PAGES

CHAPTER/ SECTION	PAGE	DATE	CONFIG CODE
List of Effective Pages	1	Dec 15/95	
	2	Dec 15/95	
	3	Dec 15/95	
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	5	Dec 15/95	
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	7	Dec 15/95	
	8	Dec 15/95	
	9	Dec 15/95	
	10	Dec 15/95	
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	5	Jun 15/94	
	6	May 15/89	
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	8	May 15/89	
	9	Nov 15/88	
	10	Nov 15/88	
	11	Jun 15/94	
	12	Jun 15/94	
	13	Jun 15/94	
	14	Jun 15/94	
33-conts	1	Jun 15/95	
33-conts	2	Jun 15/95	
33-conts	3	Jun 15/95	
33-conts	4	Dec 15/94	
33-conts	5	Dec 15/94	
33-conts	6	Dec 15/94	
33-conts	7	May 15/88	
33-conts	8	May 15/88	
33-DIAGM	1	May 15/82	
33-DIAGM	2	May 15/85	
33-DIAGM	3	May 15/85	
33-DIAGM	4	May 15/85	
33-DIAGM	5	May 15/85	
33-DIAGM	6	May 15/85	
33-DIAGM	7/8	May 15/87	
33-INDEX	1	Nov 15/87	
33-INDEX	2	Nov 15/87	
33-INDEX	3	Nov 15/87	
33-INDEX	4	Nov 15/87	
33-INDEX	5	Nov 15/87	
33-INDEX	6	Nov 15/87	
33-00-00	1	May 15/87	
33-00-00	2	May 15/87	
33-10-00	1/2	Dec 1/71	
33-10-00	3/4	Jun 15/80	
33-10-00	5/6	Dec 1/72	
33-10-00	501	Jul 15/84	
33-10-00	502	Aug 15/81	
33-10-00	503	Aug 15/81	
33-10-00	504	Jul 15/84	
33-10-00	505/506	Jul 15/84	
33-11-00	1	May 15/85	
33-11-00	2	Jan 15/73	
33-11-00	3	Feb 15/75	
33-11-00	4	Aug 15/75	
33-11-00	5	Aug 15/75	
33-11-00	6	May 15/75	
33-11-00	7/8	May 15/75	
33-11-00	101	Mar 15/81	
33-11-00	102	Mar 15/81	
33-11-00	103	Mar 15/81	
33-11-00	104	Mar 15/81	
33-11-00	105	Mar 15/81	
33-11-00	106	Mar 15/81	
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33-11-00	121/122	Mar 15/81	
33-11-00	123/124	Mar 15/81	
33-11-00	125/126	Mar 15/81	
33-11-03	401	Mar 15/84	
33-11-03	402	Mar 15/84	
33-11-03	403	Mar 15/84	
33-11-03	404	Mar 15/84	

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33-12-00	2	Dec 1/71	
33-12-01	401	Mar 15/84	
33-12-01	402	Jun 15/80	
33-12-01	403/404	Mar 15/84	
33-13-00	1	Jan 15/73	
33-13-00	2	Jan 15/73	
33-13-00	3/4	Dec 1/71	
33-13-00	5	Jan 15/73	
33-13-00	6	Dec 1/71	
33-13-00	7/8	May 15/85	
33-13-00	9	Mar 15/84	
33-13-00	10	Aug 15/81	
33-13-00	11/12	Aug 15/81	
33-13-01	401	Mar 15/84	
33-13-01	402	Jun 15/80	
33-13-01	403/404	Mar 15/84	
33-13-02	401	Mar 15/84	
33-13-02	402	Mar 15/84	
33-13-02	403/404	Apr 1/72	
33-13-04	401	Mar 15/84	
33-13-04	402	Dec 1/71	
33-13-04	403/404	Mar 15/84	
33-13-05	401	Mar 15/84	
33-13-05	402	Dec 1/71	
33-13-05	403/404	Mar 15/84	
33-13-06	401	Mar 15/84	
33-13-06	402	Mar 15/84	
33-13-07	401	Aug 15/82	
33-13-07	402	Aug 15/81	
33-13-07	403	Aug 15/81	
33-13-07	404	Aug 15/81	
33-13-08	401	May 15/82	
33-13-08	402	Aug 15/81	
33-13-08	403	Aug 15/81	
33-13-08	404	Aug 15/81	
33-13-09	401	Aug 15/81	
33-13-09	402	Aug 15/81	
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33-14-00	1	May 15/85	
33-14-00	2	Mar 15/80	
33-14-00	3	Feb 15/75	
33-14-00	4	Dec 1/71	
33-14-00	5	Aug 15/75	
33-14-00	6	Aug 15/75	
33-14-01	401	Sep 15/79	
33-14-01	402	Sep 15/79	
33-14-10	401	Mar 15/84	
33-14-10	402	Mar 15/84	
33-14-10	403	Aug 15/75	
33-14-10	404	Aug 15/75	
33-16-00	1	Aug 15/75	
33-16-00	2	Apr 1/72	
33-16-00	3	Apr 1/72	
33-16-00	4	Aug 15/75	
33-16-01	401	Mar 15/84	
33-16-01	402	Mar 15/84	
33-16-03	401	Mar 15/84	
33-16-03	402	Dec 1/71	
33-16-03	403/404	Mar 15/84	
33-16-05	401	Mar 15/84	
33-16-05	402	Mar 15/84	
33-17-00	1	Dec 15/94	
33-17-00	2	May 15/75	
33-17-00	3	Dec 1/72	
33-17-00	4	Feb 15/82	
33-17-00	5	Feb 15/82	
33-17-00	6	Feb 15/82	
33-17-00	7	Mar 15/91	
33-17-00	8	Mar 15/91	
33-17-00	9	Dec 15/94	
33-17-00	10	Mar 15/91	
33-17-00	11	Nov 15/83	
33-17-00	12	May 15/85	
33-17-00	13/14	May 15/88	
33-17-00	15/16	May 15/86	
33-17-00	17/18	May 15/86	
33-17-00	19/20	Nov 15/85	
33-17-00	21/22	Aug 15/82	
33-17-00	23	Aug 15/82	
33-17-00	24	Aug 15/82	
33-17-00	25	Aug 15/82	
33-17-00	26	Aug 15/82	
33-17-00	101	Jul 15/84	
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33-17-00	103	Jul 15/84	
33-17-00	104	Jul 15/84	
33-17-00	105	Jul 15/84	
33-17-00	106	Jul 15/84	
33-17-00	107	Jul 15/84	
33-17-00	108	Jul 15/84	
33-17-00	109	Jul 15/84	
33-17-00	110	Jul 15/84	
33-17-00	111	Jul 15/84	
33-17-00	112	Jul 15/84	
33-17-00	113	Jul 15/84	

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33-17-00	115	Jul 15/84	
33-17-00	116	Jul 15/84	
33-17-00	117	Jul 15/84	
33-17-00	118	Nov 15/85	
33-17-00	119/120	Jun 15/95	
33-17-00	121/122	May 15/88	
33-17-00	123/124	Jul 15/84	
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33-17-00	129/130	Mar 15/91	
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33-17-00	143/144	Jul 15/84	
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33-17-00	149/150	May 15/88	
33-17-00	151/152	Jul 15/84	
33-17-00	153/154	May 15/88	
33-17-00	155/156	May 15/88	
33-17-00	157/158	May 15/88	
33-17-00	159/160	Jul 15/84	
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33-17-00	163/164	Jul 15/84	
33-17-00	165/166	Jul 15/84	
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33-17-00	185	Dec 15/94	
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33-17-00	209/210	Jul 15/84	
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33-17-00	239/240	Jul 15/84	
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33-17-00	243/244	Jul 15/84	
33-17-00	245/246	Jul 15/84	
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33-17-00	249/250	Jul 15/84	
33-17-00	251/252	Jul 15/84	
33-17-00	253/254	Jul 15/84	
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33-17-00	259/260	Jul 15/84	
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33-17-00	265/266	Jul 15/84	
33-17-00	267/268	Jul 15/84	
33-17-00	269/270	Jul 15/84	
33-17-00	271/272	Jul 15/84	
33-17-00	273/274	Jul 15/84	
33-17-00	275/276	May 15/86	
33-17-00	277/278	Jul 15/84	
33-17-00	279/280	Jul 15/84	
33-17-00	281/282	Jul 15/84	
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33-17-00	287/288	Jul 15/84	
33-17-00	289/290	Nov 15/84	
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33-17-00	315/316	Jul 15/84	
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33-17-00	321/322	Jul 15/84	
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33-17-00	325/326	Jul 15/84	
33-17-00	327/328	Jul 15/84	
33-17-00	501	Dec 15/93	
33-17-00	502	Nov 15/81	
33-17-00	503	Jun 15/93	
33-17-00	504	Jun 15/93	
33-17-00	505	Nov 15/81	
33-17-00	506	Jun 15/93	
33-17-00	507	May 15/86	
33-17-00	508	Jun 15/93	
33-17-00	509/510	May 15/86	
33-17-04	401	Nov 15/85	
33-17-04	402	Nov 15/85	
33-17-04	403	Nov 15/85	
33-17-04	404	Feb 15/75	
33-17-04	405	Feb 15/75	
33-17-04	406	Nov 15/85	
33-17-04	407/408	Nov 15/85	
33-18-04	201/202	Dec 15/80	
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33-20-00	4	Aug 15/81	
33-20-00	5	Aug 15/81	
33-20-00	6	Aug 15/81	
33-21-00	1	Nov 15/81	1
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33-21-00	3/4	Nov 15/81	1
33-21-00	5	Nov 15/81	1
33-21-00	6	Nov 15/84	1
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33-21-00	10	Nov 15/81	1
33-21-00	11	May 15/85	1
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33-21-00	17/18	May 15/82	1
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33-21-00	25	Nov 15/81	1
33-21-00	26	Nov 15/81	1
33-21-00	27/28	Nov 15/81	1
33-21-00	29/30	Nov 15/81	1
33-21-00	31/32	Nov 15/81	1
33-21-00	33/34	Nov 15/81	1
33-21-00	35/36	Nov 15/81	1
33-21-00	37/38	Nov 15/81	1
33-21-00	39/40	Nov 15/81	1
33-21-00	1	Nov 15/81	2
33-21-00	2	Nov 15/81	2
33-21-00	3/4	Nov 15/81	2
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33-21-00	6	May 15/90	2
33-21-00	7	Nov 15/81	2
33-21-00	8	May 15/90	2
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33-21-00	11	Nov 15/81	2
33-21-00	12	Nov 15/81	2
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33-21-00	14	May 15/90	2
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33-21-00	17/18	Feb 15/82	2
33-21-00	19/20	Nov 15/82	2
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33-21-00	23/24	Nov 15/82	2
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33-21-00	26	May 15/90	2
33-21-00	27/28	Nov 15/82	2
33-21-00	29/30	Nov 15/81	2
33-21-00	31/32	Nov 15/81	2
33-21-00	101	Aug 15/82	
33-21-00	102	Nov 15/81	
33-21-00	103	Nov 15/81	
33-21-00	104	Nov 15/81	
33-21-00	105	Nov 15/81	
33-21-00	106	Nov 15/81	
33-21-00	107	May 15/82	
33-21-00	108	Nov 15/81	
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33-21-00	110	Nov 15/81	

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33-21-00	113	May 15/88	
33-21-00	114	May 15/88	
33-21-00	115/116	May 15/82	
33-21-00	117/118	May 15/82	
33-21-00	119/120	May 15/82	
33-21-00	121/122	Aug 15/82	
33-21-00	123/124	Aug 15/82	
33-21-00	125/126	Aug 15/82	
33-21-00	127/128	Aug 15/82	
33-21-00	129/130	Aug 15/82	
33-21-00	131/132	Aug 15/82	
33-21-00	133/134	Aug 15/82	
33-21-00	135/136	Aug 15/82	
33-21-00	137/138	Aug 15/82	
33-21-00	139/140	Nov 15/82	
33-21-00	141/142	Nov 15/82	
33-21-00	143/144	Nov 15/82	
33-21-00	145/146	Aug 15/82	
33-21-00	147/148	Aug 15/82	
33-21-00	149/150	Aug 15/82	
33-21-00	151/152	Aug 15/82	
33-21-00	153/154	Aug 15/82	
33-21-00	155/156	Nov 15/82	
33-21-00	157/158	Aug 15/82	
33-21-00	159/160	Aug 15/82	
33-21-00	161/162	Aug 15/82	
33-21-00	163/164	May 15/86	
33-21-00	501	Nov 15/82	1
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33-21-00	503	Nov 15/82	1
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33-21-00	505	May 15/82	1
33-21-00	506	Nov 15/82	1
33-21-00	501	Jun 15/93	2
33-21-00	502	Jun 15/93	2
33-21-00	503	Jun 15/93	2
33-21-00	504	Jun 15/93	2
33-21-00	505	Jun 15/93	2
33-21-00	506	Jun 15/93	2
33-21-00	507/508	Jun 15/93	2
33-21-01	401	Nov 15/82	
33-21-01	402	Dec 1/71	
33-21-01	403/404	Nov 15/82	
33-21-02	401	Nov 15/82	
33-21-02	402	Nov 15/82	
33-21-02	403	Aug 15/81	
33-21-02	404	Nov 15/82	
33-21-04	401	Nov 15/82	
33-21-04	402	Nov 15/81	
33-21-04	403	Nov 15/81	
33-21-04	404	Nov 15/81	
33-21-04	405/406	Nov 15/81	
33-21-05	401	Nov 15/82	
33-21-05	402	Aug 15/81	
33-21-05	403/404	Nov 15/82	
33-21-06	401	Nov 15/82	
33-21-06	402	Dec 1/71	
33-21-06	403/404	Nov 15/82	
33-21-07	401	Nov 15/82	
33-21-07	402	Dec 1/71	
33-21-07	403/404	Nov 15/82	
33-21-14	401	Aug 15/81	
33-21-14	402	Aug 15/81	
33-21-15	401	Aug 15/81	
33-21-15	402	Aug 15/81	
33-21-19	401	Aug 15/81	
33-21-19	402	Aug 15/81	
33-21-19	403/404	Aug 15/81	
33-21-19	501	Nov 15/82	
33-21-19	502	Aug 15/81	
33-21-19	503/504	Nov 15/82	
33-21-20	401	May 15/87	
33-21-20	402	May 15/87	
33-21-20	403/404	May 15/88	
33-21-21	401	May 15/87	
33-21-21	402	Aug 15/81	
33-21-21	403/404	Aug 15/81	
33-21-24	401	Apr 1/72	
33-21-24	402	Apr 1/72	
33-21-25	401	Apr 1/72	
33-21-25	402	Apr 1/72	
33-21-25	403/404	Apr 1/72	
33-21-26	401	Apr 1/72	
33-21-26	402	Apr 1/72	
33-21-27	401	Apr 1/72	
33-21-27	402	Apr 1/72	
33-21-27	403/404	Apr 1/72	
33-21-31	401	Apr 1/72	
33-21-31	402	Apr 1/72	
33-21-36	401	Mar 15/83	
33-21-36	402	Mar 15/83	
33-21-36	403/404	Aug 15/81	
33-21-37	401	Mar 15/83	
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33-21-38	401	Aug 15/81	
33-21-38	402	Aug 15/81	
33-22-00	1	Aug 15/82	
33-22-00	2	Nov 15/74	
33-22-00	3	Aug 15/82	
33-22-00	4	Aug 15/82	
33-22-00	501/502	Mar 15/80	
33-22-01	401	Mar 15/83	
33-22-01	402	Nov 15/74	
33-22-01	403/404	Mar 15/83	
33-23-00	1	Sep 15/80	
33-23-00	2	Nov 15/74	
33-23-00	3/4	Nov 15/83	
33-23-00	501/502	May 15/82	
33-23-01	401	Mar 15/83	
33-23-01	402	Nov 15/74	
33-23-01	403/404	Mar 15/83	
33-23-02	401	Sep 15/80	
33-23-02	402	Sep 15/80	
33-23-02	403/404	Sep 15/80	
33-24-00	1	Dec 1/71	
33-24-00	2	Dec 1/71	
33-24-00	3/4	Jun 1/72	
33-24-00	501/502	Nov 15/82	
33-24-01	401	Mar 15/83	
33-24-01	402	Dec 1/71	
33-24-01	403/404	Mar 15/83	
33-25-00	1	Nov 15/73	
33-25-00	2	May 15/82	
33-25-00	3	May 15/82	
33-25-00	4	May 15/82	
33-25-00	5	May 15/82	
33-25-00	6	May 15/82	
33-25-00	7	May 15/82	
33-25-00	8	May 15/82	
33-25-00	9/10	May 15/82	
33-25-00	11/12	May 15/82	
33-25-00	501	Mar 15/83	
33-25-00	502	Mar 15/83	
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LIGHTS

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	BALLAST ASSEMBLY - LUMINAIRE	33-21-36		
	Removal/Installation		401	032, 033
	BALLAST - WINDOW VALANCE	33-21-37		
	Removal/Installation		401	032-999
	BALLAST - CROSS-AISLE	33-21-38		
	Removal/Installation		401	032, 033
C	CABIN ATTENDANT WORK AND			
C	AUXILIARY BAR LIGHTING	33-22-00		
C	Description and Operation		1	ALL
C	Adjustment/Test		501	ALL
C	LIGHT - CABIN ATTENDANT WORK	33-22-01		
C	Removal/Installation		401	ALL

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R	Description and Operation		1	ALL
	Adjustment/Test		501	ALL
	LIGHTS - COAT CLOSET	33-23-01		
R	Removal/Installation		401	ALL
	LIGHT - INCANDESCENT, MAGAZINE CLOSET	33-23-02		
R	Removal/Installation		401	001-006
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R	Description and Operation		1	ALL
	Adjustment/Test		501	ALL
R	LIGHTS - BOARDING	33-24-01		
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R	Description and Operation		1	ALL
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	NOTE: REF. 33-51-00 FOR EMERGENCY LIGHTING SYSTEM			
R	LIGHTS - GALLEY OVERHEAD	33-25-01		
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R	Removal/Installation		401	ALL
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R	Removal/Installation		401	ALL
	LIGHT - GALLEY LOADING DOOR	33-25-10		
R	Removal/Installation		401	ALL
	LIGHT - GALLEY STANDBY	33-25-11		
R	Removal/Installation		401	ALL
	PASSENGER CALL SYSTEM	33-26-00		
R	Description and Operation		1	ALL
	Adjustment/Test		501	ALL
	NOTE: Passenger Audio Entertainment and Service System (See 23-33-00)			
	INDICATOR - PASSENGER CALL	33-26-01		
R	Removal/Installation		401	ALL
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R	Removal/Installation		401	ALL

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R	Description and Operation		1	ALL
	Fault Isolation		101	ALL
	Adjustment/Test		501	ALL
	NOTE: REF. 33-51-00 FOR EMERGENCY LIGHTING SYSTEM			
	FIXTURE - FORWARD LAVATORY LIGHTING	33-27-01		
R	Removal/Installation		401	ALL
	FIXTURE - AFT LAVATORY LIGHTING	33-27-02		
	Removal/Installation		401	ALL
	LAVATORY LIGHTS OVERRIDE SWITCH, ASSEMBLY	33-27-05		
	Removal/Installation		401	ALL
	READING LIGHTING	33-28-00		
R	Description and Operation		1	ALL
	Adjustment/Test		501	ALL
	NOTE: REF. 23-33-00 FOR COMMUNICATIONS SYSTEM			
	LIGHT - READING	33-28-01		
R	Removal/Installation		401	ALL

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	SIGN LIGHTING	33-29-00		
R	Description and Operation		1	ALL
	Fault Isolation		101	ALL
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	NOTE: REF. 35-21-00 FOR PASSENGER OXYGEN SYSTEM			
	SIGN - LAVATORY RETURN TO CABIN	33-29-02		
R	Removal/Installation		401	ALL
	SIGN - CABIN ATTENDANTS ORDINANCE	33-29-05		
R	Removal/Installation		401	ALL
	SIGN - AFT LAVATORIES OCCUPIED	33-29-06		
R	Removal/Installation		401	ALL
	FLASHER - ORDINANCE SIGNS	33-29-07		
	Removal/Installation		401	ALL
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R	Removal/Installation		401	ALL
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R	Removal/Installation		401	ALL
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R	Removal/Installation		401	ALL
	SIGN - PENDANT-MOUNTED EXIT LOCATOR	33-29-15		
R	Removal/Installation		401	ALL
	SIGN - DOOR EXIT	33-29-14		
	Removal/Installation		401	ALL
	SIGN - LAVATORY OCCUPIED, NO SMOKING, FASTEN SEAT BELTS, ORDINANCE	33-29-16		
R	Removal/Installation		401	ALL
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	Subject	Chapter Section Subject	Page	Effectivity
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	Description and Operation		1	ALL
	Adjustment/Test		501	ALL
	LIGHTS - CARGO COMPARTMENT	33-31-01		
	Removal/Installation		401	ALL
	LIGHT - CARGO LOADING DOOR	33-31-04		
	Removal/Installation		401	ALL
	SERVICE LIGHTING	33-32-00		
	Description and Operation		1	ALL
R	Adjustment/Test		501	ALL
	LIGHTS - SERVICE COMPARTMENT	33-32-01		
	Removal/Installation		401	ALL
	FLOODLIGHTS - REFUELING	33-32-02		
	Removal/Installation		401	ALL
	LIGHTS - APU COMPARTMENT	33-32-03		
R	Removal/Installation		401	ALL
	LIGHT - POTABLE WATER SERVICE PANEL	33-32-05		
	Removal/Installation		401	ALL
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	Removal/Installation		401	ALL
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	Description/Operation		1	ALL
	Fault Isolation		101	ALL
	Adjustment/Test		501	ALL
	LIGHT - NOSE WHEEL WELL	33-33-01		
	Removal/Installation		401	ALL
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	Adjustment/Test		501	ALL
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	Description and Operation		1	ALL
	Fault Isolation		101	ALL
	LIGHT - ANTICOLLISION UPPER	33-41-01		
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	LIGHT - FORWARD STROBE	33-41-03		
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	LANDING AND TAXI LIGHTING	33-43-00		
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	Fault Isolation		101	ALL
R	Adjustment/Test		501	ALL
	LIGHT - WING LANDING	33-43-01		
	Removal/Installation		401	ALL
	LIGHT - NOSE GEAR LANDING/TAXI	33-43-03		
	Removal/Installation		401	ALL
	LIGHT - RUNWAY TURNOFF	33-43-04		
	Removal/Installation		401	ALL
	WING POSITION LIGHTING	33-44-00		
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	Fault Isolation		101	ALL
	LIGHT - FORWARD POSITION	33-44-01		
	Removal/Installation		401	ALL
	LIGHT LENS - FORWARD POSITION	33-44-02		
	Removal/Installation		401	ALL
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	Fault Isolation		101	ALL
	Adjustment/Test		501	ALL
	LIGHT - EMERGENCY EVACUATION	33-51-02		
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	Removal/Installation		401	ALL
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	Removal/Installation		401	ALL
	LIGHT - GALLEY EMERGENCY	33-51-16		
	Removal/Installation		401	ALL
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C	Description and Operation		001	ALL
C	Fault Isolation		101	ALL
C	Adjustment/Test		501	ALL
C	EGRESS EXIT MARKER	33-59-01		
C	Removal/Installation		401	ALL
C	EGRESS POWER SUPPLY	33-59-03		
C	Removal/Installation		401	ALL
C	Adjustment/Test		501	ALL
C	EGRESS AISLE LIGHTING	33-59-04		
C	Removal/Installation		401	ALL
C	EGRESS AISLE LIGHTING INSTALLATION	33-59-05		
C	Removal/Installation		401	ALL

CHAPTER 33-LIGHTS

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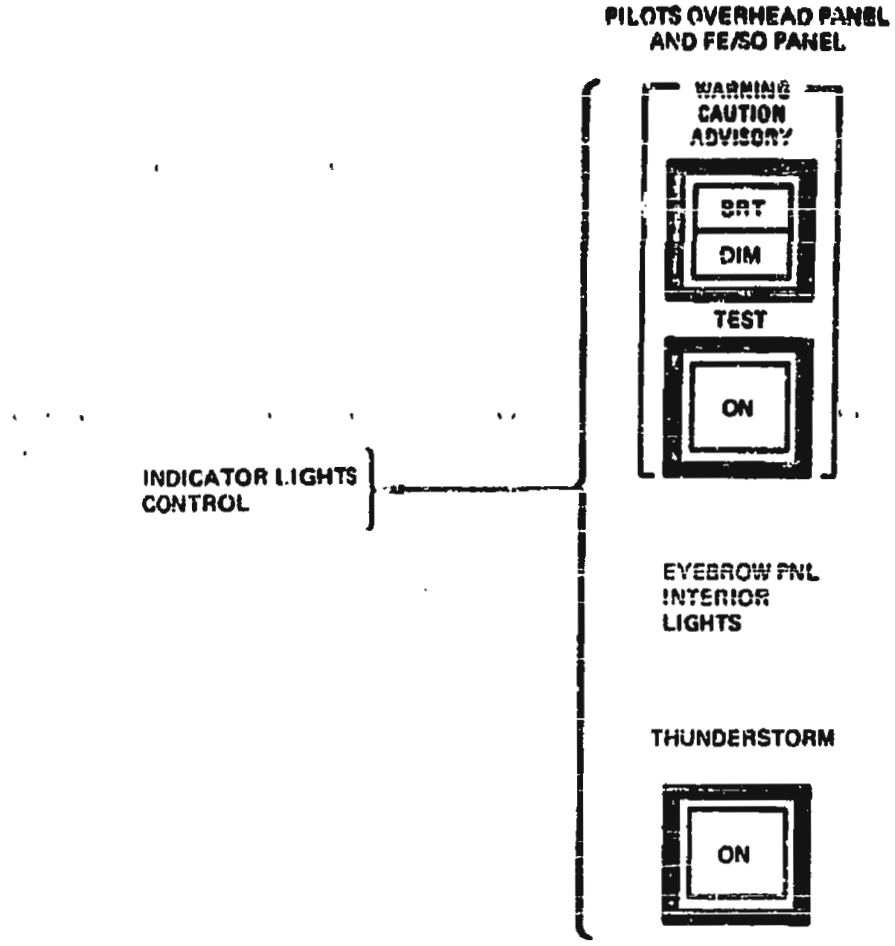


TITLE CHAP/SEC
INDICATOR LIGHTS CONTROL 3317

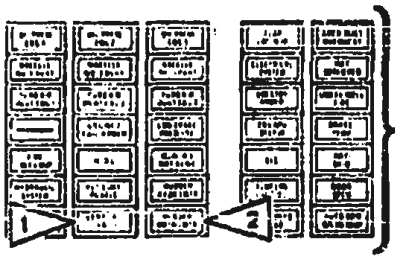
M1-0002-33-8801

LIGHTING CONTENTS

R EFFECTIVITY: ALL
R
001B

GENERAL AIRCRAFT CONTENTS

(CENTER INSTRUMENT PANEL)



PILOTS CAUTION AND WARNING PANEL

FLAP LRS INOP

FLAP LRS LIMITING

→ FLAP LRS MALFUNCTION

ROLL SPEED BRAKE → ROLL SPEED BRAKE ANNUNCIATOR/SPOILER L5 & 6 AND R5 & 6 PUSH LIGHT

ICING → ICING ANNUNCIATOR

DUAL A/L NOT AVAIL → CHAPTER 22

AUTO GND SPLRS INOP → CHAPTER 22

NOTE

1 ON AIRCRAFT 032-999 LEGEND READS ATT3

2 ON AIRCRAFT 032-999 LEGEND IS A BLANK

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M1-0000-33-6009

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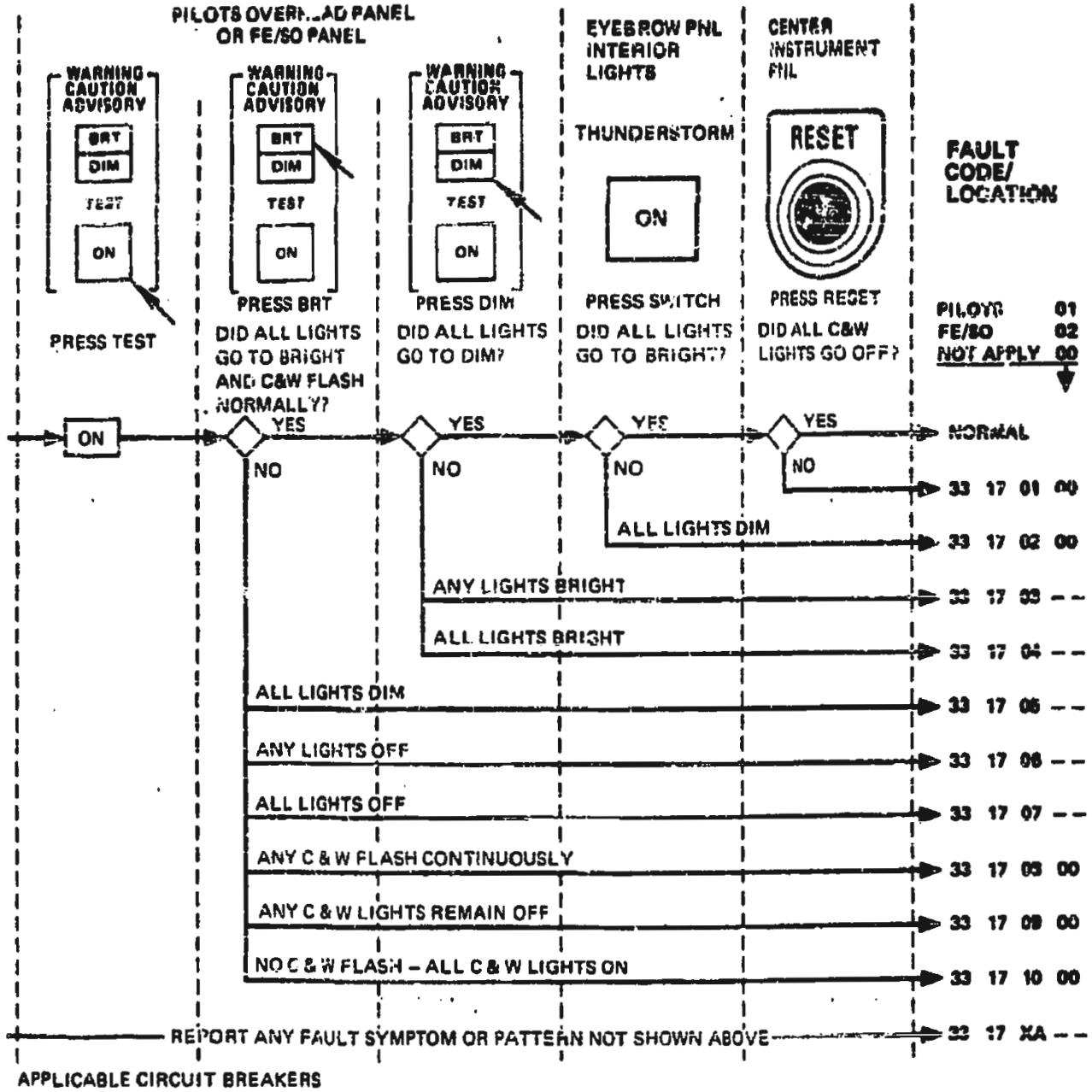
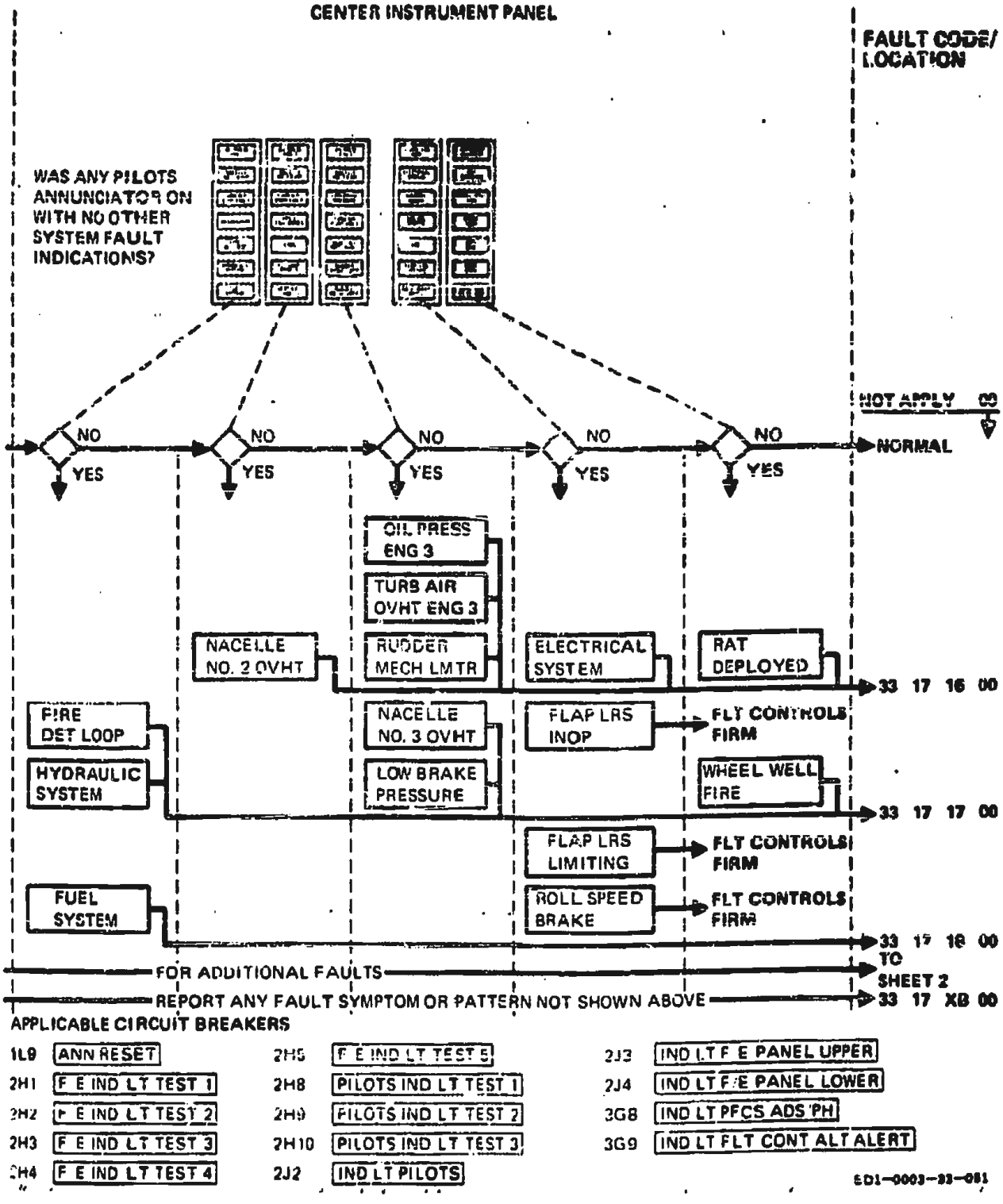

PILOTS OVERHEAD PANEL OR FE/SO PANEL
EYEBROW PNL INTERIOR LIGHTS
CENTER INSTRUMENT PNL
WARNING CAUTION ADVISORY
BRT
DIM
TEST
ON
THUNDERSTORM
RESET
FAULT CODE/ LOCATION
PRESS TEST
PRESS BRT
PRESS DIM
PRESS SWITCH
PRESS RESET
PILOTS 01
FE/SO 02
NOT APPLY 00
DID ALL LIGHTS GO TO BRIGHT AND C&W FLASH NORMALLY?
DID ALL LIGHTS GO TO DIM?
DID ALL LIGHTS GO TO BRIGHT?
DID ALL C&W LIGHTS GO OFF?
YES
NO
NORMAL
33 17 01 00
ALL LIGHTS DIM
33 17 02 00
ANY LIGHTS BRIGHT
33 17 03 - -
ALL LIGHTS BRIGHT
33 17 04 - -
ALL LIGHTS DIM
33 17 05 - -
ANY LIGHTS OFF
33 17 06 - -
ALL LIGHTS OFF
33 17 07 - -
ANY C & W FLASH CONTINUOUSLY
33 17 08 00
ANY C & W LIGHTS REMAIN OFF
33 17 09 00
NO C & W FLASH – ALL C & W LIGHTS ON
33 17 10 00
REPORT ANY FAULT SYMPTOM OR PATTERN NOT SHOWN ABOVE
33 17 XA - -
APPLICABLE CIRCUIT BREAKERS
1L9 ANN RESET
2H1 F/E IND LT TEST 1
2H2 F/E IND LT TEST 2
2H3 F/E IND LT TEST 3
2H4 F/E IND LT TEST 4
2H5 F/E IND LT TEST 5
2H8 PILOTS IND LT TEST 1
2H9 PILOTS IND LT TEST 2
2H10 PILOTS IND LT TEST 3
2J2 IND LT PILOTS
2J3 IND LT F/E PANEL UPPER
2J4 IND LT F/E PANEL LOWER
3G8 IND LT PFCS ADS/PH
3G9 IND LT FLT CONT ALT ALERT
ED1-0004-33-B04

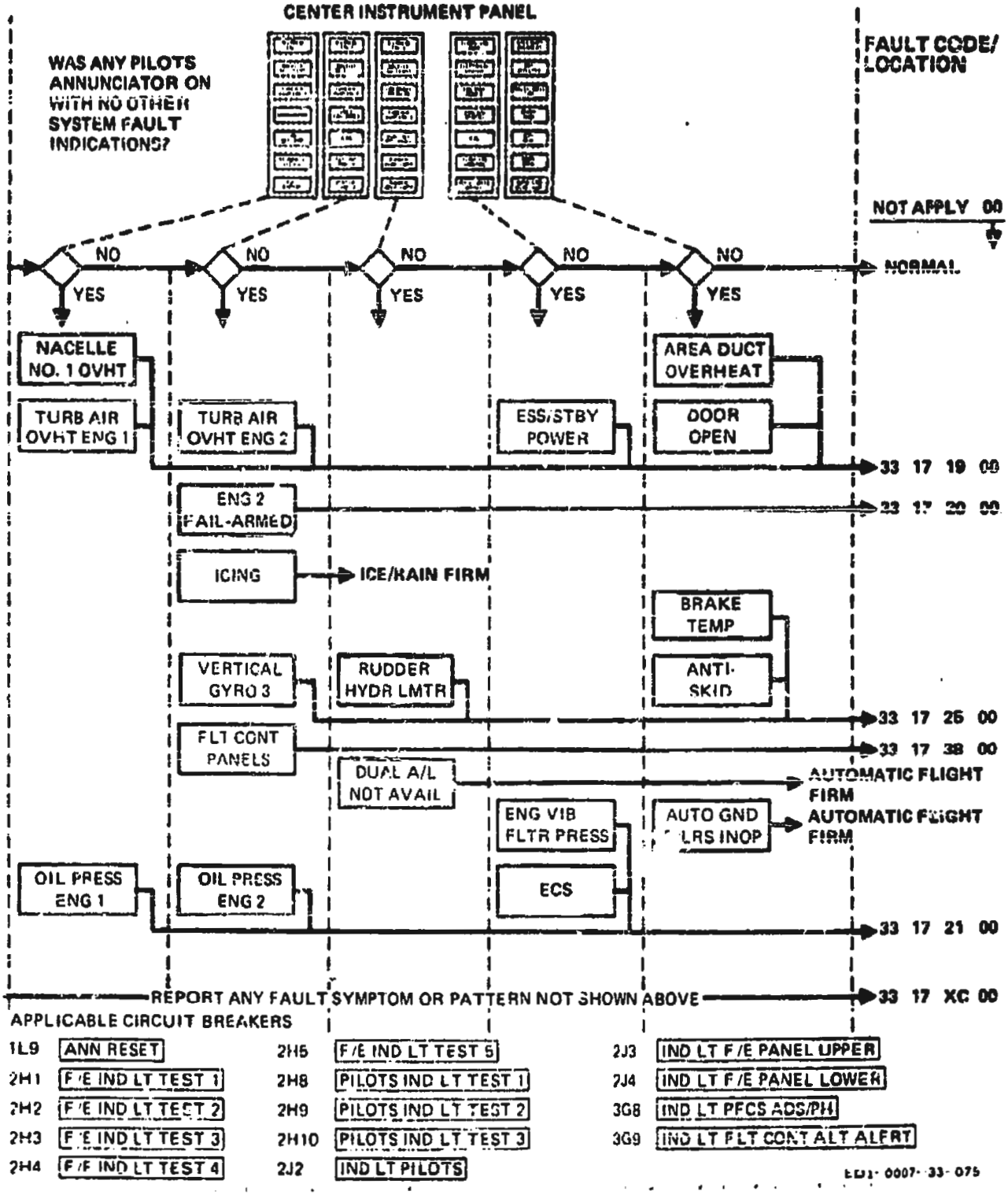
R Indicator Lights Control - Fault Codes
Figure 1

EFFECTIVITY: ALL

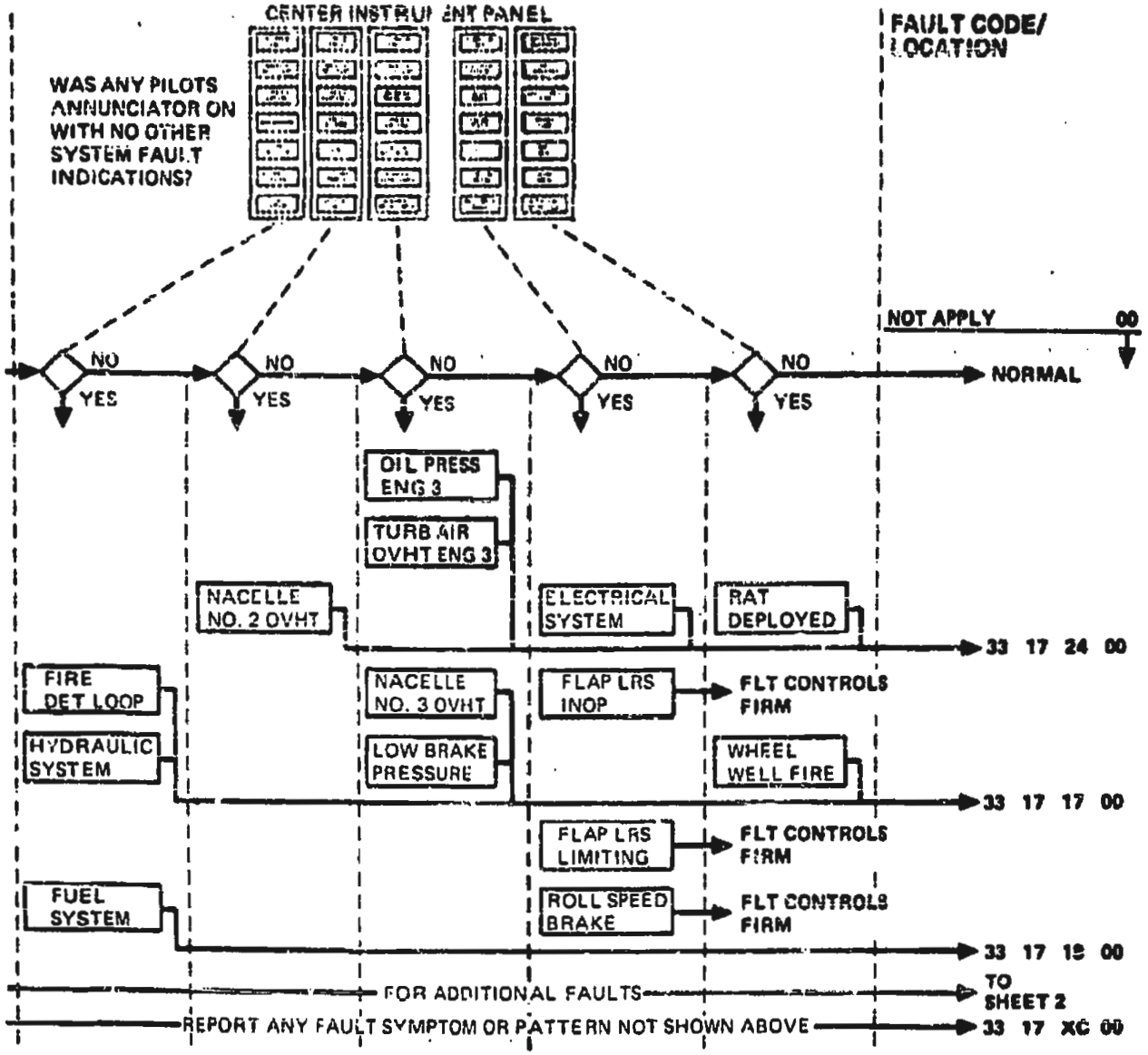
33-FAULT CODE DIAGRAM


CENTER INSTRUMENT PANEL
FAULT CODE/ LOCATION
WAS ANY PILOTS ANNUNCIATOR ON WITH NO OTHER SYSTEM FAULT INDICATIONS?
NO
YES
NOT APPLY 00
NORMAL
OIL PRESS ENG 3
TURB AIR OVHT ENG 3
NACELLE NO. 2 OVHT
RUDDER MECH LMTR
ELECTRICAL SYSTEM
RAT DEPLOYED
33 17 16 00
FIRE DET LOOP
HYDRAULIC SYSTEM
NACELLE NO. 3 OVHT
LOW BRAKE PRESSURE
FLAP LRS INOP
FLT CONTROLS FIRM
WHEEL WELL FIRE
33 17 17 00
FLAP LRS LIMITING
FLT CONTROLS FIRM
FUEL SYSTEM
ROLL SPEED BRAKE
FLT CONTROLS FIRM
33 17 18 00
FOR ADDITIONAL FAULTS
TO SHEET 2
REPORT ANY FAULT SYMPTOM OR PATTERN NOT SHOWN ABOVE
33 17 XB 00
APPLICABLE CIRCUIT BREAKERS
1L9 ANN RESET
2H1 F E IND LT TEST 1
2H2 F E IND LT TEST 2
2H3 F E IND LT TEST 3
2H4 F E IND LT TEST 4
2H5 F E IND LT TEST 5
2H8 PILOTS IND LT TEST 1
2H9 PILOTS IND LT TEST 2
2H10 PILOTS IND LT TEST 3
2J2 IND LT PILOTS
2J3 IND LT F E PANEL UPPER
2J4 IND LT F E PANEL LOWER
3G8 IND LT PFCS ADS PH
3G9 IND LT FLT CONT ALT ALERT
ED1-0003-33-081

Pilots Caution and Warning Panel (Sheet 1) - Fault Codes
Figure 2


CENTER INSTRUMENT PANEL
WAS ANY PILOTS ANNUNCIATOR ON WITH NO OTHER SYSTEM FAULT INDICATIONS?
FAULT CODE/ LOCATION
NOT APPLY 00
NO
YES
NORMAL
NACELLE NO. 1 OVHT
TURB AIR OVHT ENG 1
TURB AIR OVHT ENG 2
ESS/STBY POWER
AREA DUCT OVERHEAT
DOOR OPEN
33 17 19 00
ENG 2 FAIL-ARMED
33 17 20 00
ICING
ICE/RAIN FIRM
BRAKE TEMP
VERTICAL GYRO 3
RUDDER HYDR LMTR
ANTI-SKID
33 17 25 00
FLT CONT PANELS
33 17 38 00
DUAL A/L NOT AVAIL
AUTOMATIC FLIGHT FIRM
ENG VIB FLTR PRESS
AUTO GND LRS INOP
AUTOMATIC FLIGHT FIRM
OIL PRESS ENG 1
OIL PRESS ENG 2
ECS
33 17 21 00
REPORT ANY FAULT SYMPTOM OR PATTERN NOT SHOWN ABOVE
33 17 XC 00
APPLICABLE CIRCUIT BREAKERS
1L9 ANN RESET
2H1 F/E IND LT TEST 1
2H2 F/E IND LT TEST 2
2H3 F/E IND LT TEST 3
2H4 F/E IND LT TEST 4
2H5 F/E IND LT TEST 5
2H8 PILOTS IND LT TEST 1
2H9 PILOTS IND LT TEST 2
2H10 PILOTS IND LT TEST 3
2J2 IND LT PILOTS
2J3 IND LT F/E PANEL UPPER
2J4 IND LT F/E PANEL LOWER
3G8 IND LT PFCS ADS/PH
3G9 IND LT FLT CONT ALT ALERT
EDI- 0007- 33- 075

Pilots Caution and Warning Panel (Sheet 2) - Fault Codes
Figure 3

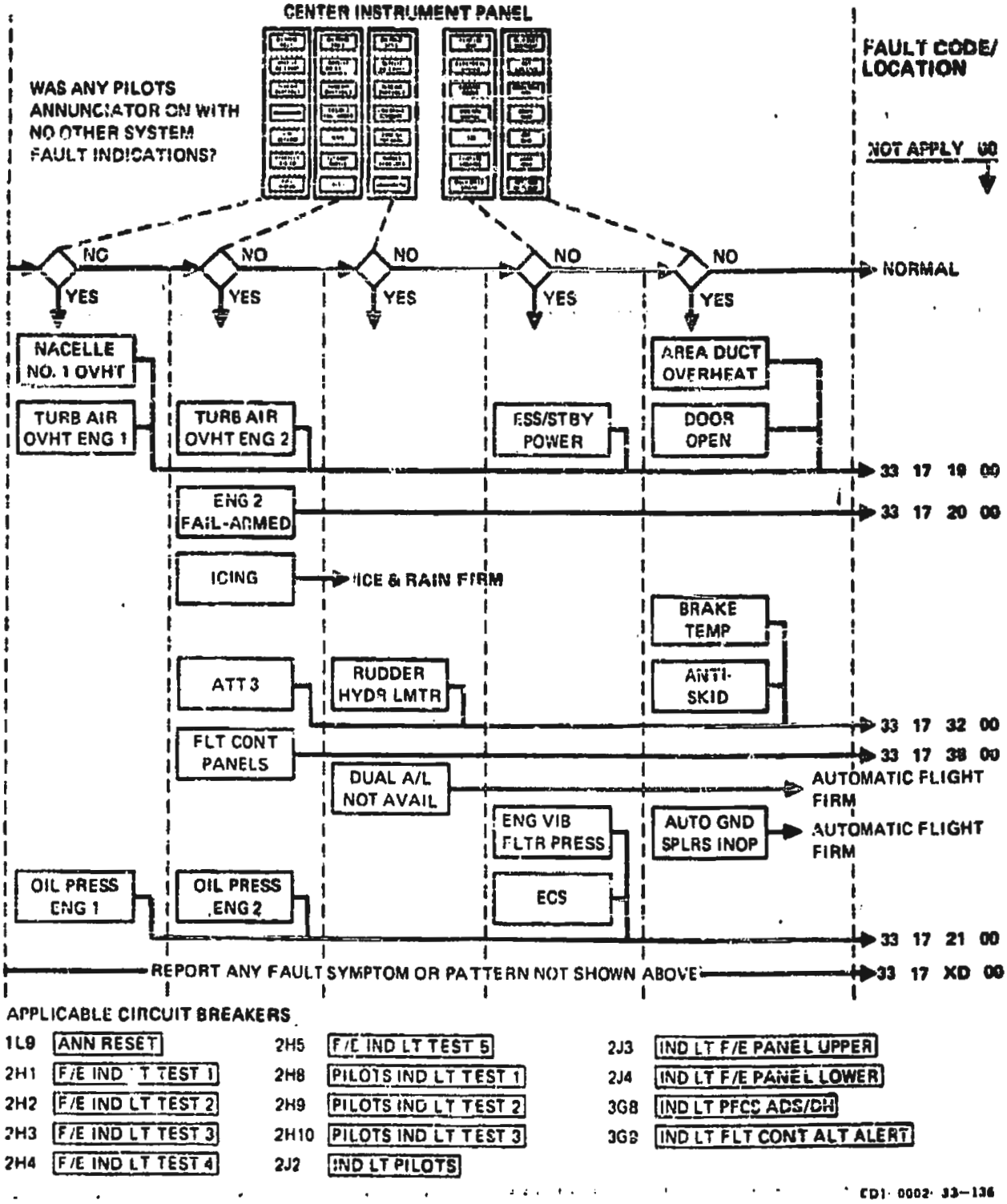


APPLICABLE CIRCUIT BREAKERS

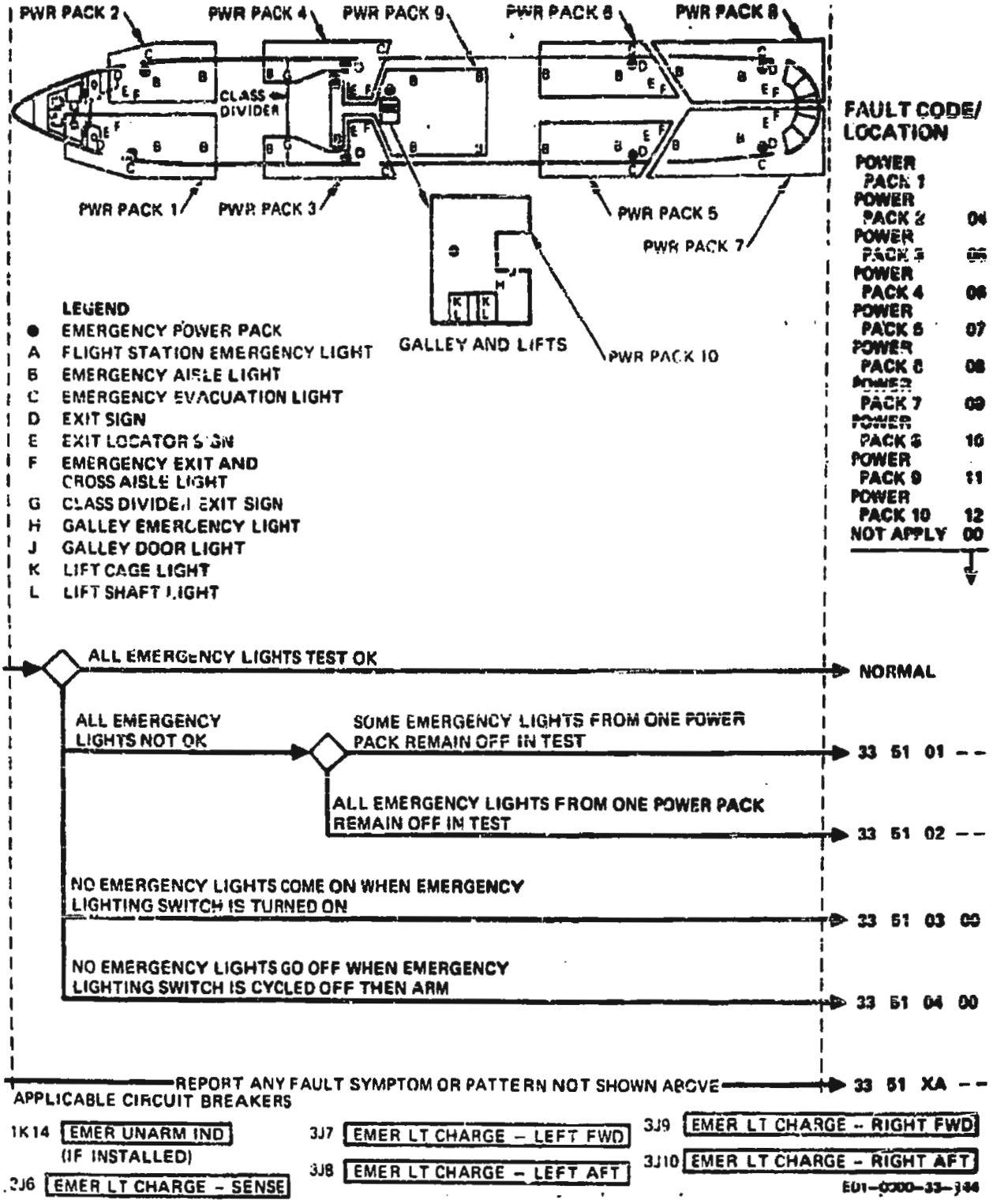
1L9	ANN RESET	2H5	F/E IND LT TEST 5	2J3	IND LT F/E PANEL UPPER
2H1	F/E IND LT TEST 1	2H8	CAPT IND LT TEST 1	2J4	IND LT F/E PANEL LOWER
2H2	F/E IND LT TEST 2	2H9	CAPT IND LT TEST 2	3G8	IND LT PFCS ADS/PH
2H3	F/E IND LT TEST 3	2H10	CAPT IND LT TEST 3	3G9	IND LT CONT ALT ALERT
2H4	F/E IND LT TEST 4	2J2	IND LT PILOTS		

ED1-0000-33-149

Pilots Caution and Warning Panel (Sheet 1) - Fault Codes
Figure 4


CENTER INSTRUMENT PANEL
WAS ANY PILOTS ANNUNCIATOR ON WITH NO OTHER SYSTEM FAULT INDICATIONS?
FAULT CODE/ LOCATION
NOT APPLY 00
NO
YES
NORMAL
NACELLE NO. 1 OVHT
TURB AIR OVHT ENG 1
TURB AIR OVHT ENG 2
ESS/STBY POWER
AREA DUCT OVERHEAT
DOOR OPEN
33 17 19 00
ENG 2 FAIL-ARMED
33 17 20 00
ICING
ICE & RAIN FIRM
BRAKE TEMP
ATT 3
RUDDER HYDR LMTR
ANTI-SKID
33 17 32 00
FLT CONT PANELS
33 17 38 00
DUAL A/L NOT AVAIL
AUTOMATIC FLIGHT FIRM
ENG VIB FLTR PRESS
AUTO GND SPLRS INOP
AUTOMATIC FLIGHT FIRM
OIL PRESS ENG 1
OIL PRESS ENG 2
ECS
33 17 21 00
REPORT ANY FAULT SYMPTOM OR PATTERN NOT SHOWN ABOVE
33 17 XD 00
APPLICABLE CIRCUIT BREAKERS
1L9 ANN RESET
2H1 F/E IND LT TEST 1
2H2 F/E IND LT TEST 2
2H3 F/E IND LT TEST 3
2H4 F/E IND LT TEST 4
2H5 F/E IND LT TEST 5
2H8 PILOTS IND LT TEST 1
2H9 PILOTS IND LT TEST 2
2H10 PILOTS IND LT TEST 3
2J2 IND LT PILOTS
2J3 IND LT F/E PANEL UPPER
2J4 IND LT F/E PANEL LOWER
3G8 IND LT PFCS ADS/DH
3G9 IND LT FLT CONT ALT ALERT
CD1-0002-33-136

Pilots Caution and Warning Panel (Sheet 2) - Fault Codes
Figure 5

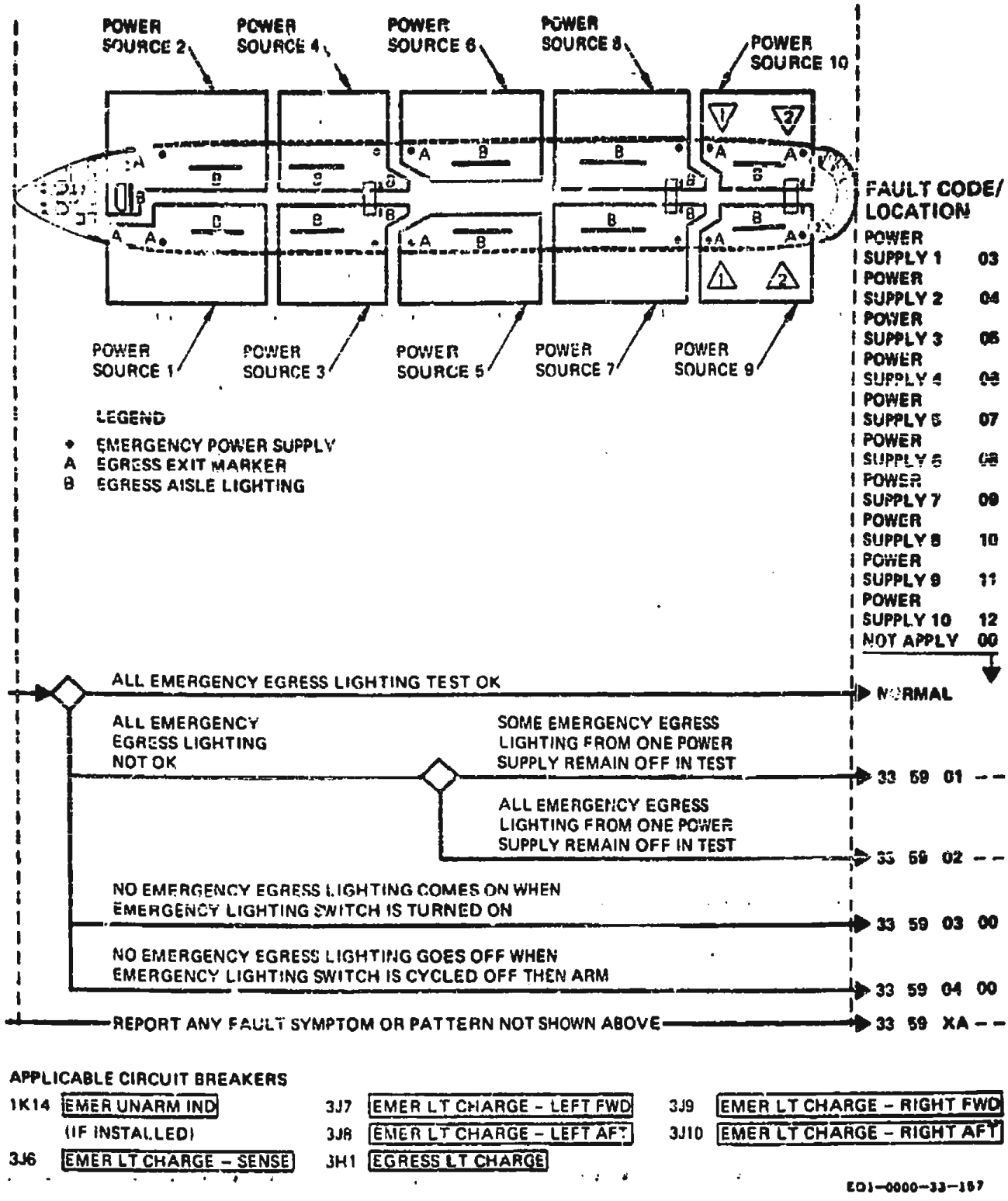

PWR PACK 2
PWR PACK 4
PWR PACK 9
PWR PACK 6
PWR PACK 8
CLASS DIVIDER
PWR PACK 1
PWR PACK 3
PWR PACK 5
PWR PACK 7
GALLEY AND LIFTS
PWR PACK 10
LEGEND
● EMERGENCY POWER PACK
A FLIGHT STATION EMERGENCY LIGHT
B EMERGENCY AISLE LIGHT
C EMERGENCY EVACUATION LIGHT
D EXIT SIGN
E EXIT LOCATOR SIGN
F EMERGENCY EXIT AND CROSS AISLE LIGHT
G CLASS DIVIDER EXIT SIGN
H GALLEY EMERGENCY LIGHT
J GALLEY DOOR LIGHT
K LIFT CAGE LIGHT
L LIFT SHAFT LIGHT
FAULT CODE/ LOCATION
POWER PACK 1
POWER PACK 2 04
POWER PACK 3 05
POWER PACK 4 06
POWER PACK 5 07
POWER PACK 6 08
POWER PACK 7 09
POWER PACK 8 10
POWER PACK 9 11
POWER PACK 10 12
NOT APPLY 00
ALL EMERGENCY LIGHTS TEST OK
NORMAL
ALL EMERGENCY LIGHTS NOT OK
SOME EMERGENCY LIGHTS FROM ONE POWER PACK REMAIN OFF IN TEST
33 51 01 - -
ALL EMERGENCY LIGHTS FROM ONE POWER PACK REMAIN OFF IN TEST
33 51 02 - -
NO EMERGENCY LIGHTS COME ON WHEN EMERGENCY LIGHTING SWITCH IS TURNED ON
33 51 03 00
NO EMERGENCY LIGHTS GO OFF WHEN EMERGENCY LIGHTING SWITCH IS CYCLED OFF THEN ARM
33 51 04 00
REPORT ANY FAULT SYMPTOM OR PATTERN NOT SHOWN ABOVE
33 51 XA - -
APPLICABLE CIRCUIT BREAKERS
1K14 EMER UNARM IND (IF INSTALLED)
2J6 EMER LT CHARGE - SENSE
3J7 EMER LT CHARGE - LEFT FWD
3J8 EMER LT CHARGE - LEFT AFT
3J9 EMER LT CHARGE - RIGHT FWD
3J10 EMER LT CHARGE - RIGHT AFT
E01-0000-33-144

Emergency Lighting - Fault Codes
Figure 6

R EFFECTIVITY: ALL

R 0508

33-FAULT CODE DIAGRAM


POWER SOURCE 2
POWER SOURCE 4
POWER SOURCE 6
POWER SOURCE 8
POWER SOURCE 10
POWER SOURCE 1
POWER SOURCE 3
POWER SOURCE 5
POWER SOURCE 7
POWER SOURCE 9
LEGEND
• EMERGENCY POWER SUPPLY
A EGRESS EXIT MARKER
B EGRESS AISLE LIGHTING
FAULT CODE/ LOCATION
POWER SUPPLY 1 03
POWER SUPPLY 2 04
POWER SUPPLY 3 05
POWER SUPPLY 4 06
POWER SUPPLY 5 07
POWER SUPPLY 6 08
POWER SUPPLY 7 09
POWER SUPPLY 8 10
POWER SUPPLY 9 11
POWER SUPPLY 10 12
NOT APPLY 00
ALL EMERGENCY EGRESS LIGHTING TEST OK
NORMAL
ALL EMERGENCY EGRESS LIGHTING NOT OK
SOME EMERGENCY EGRESS LIGHTING FROM ONE POWER SUPPLY REMAIN OFF IN TEST
33 59 01 - -
ALL EMERGENCY EGRESS LIGHTING FROM ONE POWER SUPPLY REMAIN OFF IN TEST
33 59 02 - -
NO EMERGENCY EGRESS LIGHTING COMES ON WHEN EMERGENCY LIGHTING SWITCH IS TURNED ON
33 59 03 00
NO EMERGENCY EGRESS LIGHTING GOES OFF WHEN EMERGENCY LIGHTING SWITCH IS CYCLED OFF THEN ARM
33 59 04 00
REPORT ANY FAULT SYMPTOM OR PATTERN NOT SHOWN ABOVE
33 59 XA - -
APPLICABLE CIRCUIT BREAKERS
1K14 EMER UNARM IND (IF INSTALLED)
3J6 EMER LT CHARGE - SENSE
3J7 EMER LT CHARGE - LEFT FWD
3J8 EMER LT CHARGE - LEFT AFT
3H1 EGRESS LT CHARGE
3J9 EMER LT CHARGE - RIGHT FWD
3J10 EMER LT CHARGE - RIGHT AFT
EQ1-0000-33-167

R Emergency Egress Lighting - Fault Codes
Figure 7

R EFFECTIVITY: ALL

33-FAULT CODE DIAGRAM

FAULT CODE INDEX
TABLE 1

FAULT CODE	1. LOG BOOK REPORT 2. FAULT ISOLATION REFERENCE
33 17 XA __	1. An Indicator Lights Control fault was encountered by the crew which is not covered in the fault code diagram. (Ref. Fault Code diagram for flight crew actions.)
	2. 33-17-00 Fig. 104 Block 1
33 17 XB 00	1. A Pilots Caution and Warning Panel fault was encountered by the crew which is not covered in the fault code diagram. (Ref. Fault Code diagram for flight crew actions.)
	2. 33-17-00 Fig. 106 (Sheet 1) Block 1 33-17-00 Fig. 106 (Sheet 2) Block 1
33 17 XC 00	1. A Pilots Caution and Warning Panel fault was encountered by the crew which is not covered in the fault code diagram. (Ref. Fault Code diagram for flight crew actions.)
	2. 33-17-00 Fig. 106 (Sheet 1) Block 1 33-17-00 Fig. 106 (Sheet 2) Block 1
33 17 XD 00	1. A Pilots Caution and Warning Panel fault was encountered by the crew which is not covered in the fault code diagram. (Ref. Fault Code diagram for flight crew actions.)
	2. 33-17-00 Fig. 106 (Sheet 1) Block 1 33-17-00 Fig. 106 (Sheet 2) Block 1
33 51 XA __	1. An Emergency Lighting fault was encountered by the crew which is not covered ir the fault code diagram. (Ref. Fault Code diagram for flight crew actions.)
	2. 33-51-00 Fig. 103 Block 1

FAULT CODE INDEX
TABLE 1 (CONTINUED)

FAULT CODE	1. LOG BOOK REPORT 2. FAULT ISOLATION REFERENCE
R 33 59 XA __	1. An Emergency Egress Lighting fault was encountered by the crew which is not covered in the fault code diagram. (Ref. Fault Code diagram for flight crew actions.)
R	2. 33-59-00 Fig. 103 Block 1
33 17 01 00	1. Pilots caution and warning lights did not reset.
	2. 33-17-00 Fig. 105 Block 8
33 17 02 00	1. All indicator lights dim in THUNDERSTORM mode.
	2. 33-17-00 Fig. 104 (Sheet 1) Block 2
33 17 03 __	1. Any (01=Pilots, 02=FE/SO) warning, caution, advisory light(s) bright in DIM mode.
	2. 33-17-00 Fig. 104 (Sheet 2) Block 12
33 17 04 __	1. ALL (01=Pilots, 02=FE/SO) warning, caution, advisory lights bright in DIM mode.
	2. 33-17-00 Fig. 104 (Sheet 2) Block 3
33 17 05 __	1. All (01=Pilots, 02=FE/SO) warning, caution, advisory lights dim in BRT mode.
	2. 33-17-00 Fig. 104 (Sheet 1) Block 3
33 17 06 __	1. Any (01=Pilots, 02=FE/SO) caution, warning, advisory light(s) off: (List light(s) off).
	2. 33-17-00 Fig. 103 (Sheet 2) Block 2
33 17 07 __	1. All (01=Pilots, 02=FE/SO) caution, warning, advisory lights off.
	2. 33-17-00 Fig. 103 (Sheet 2) Block 5

FAULT CODE INDEX
TABLE 1 (CONTINUED)

FAULT CODE	1. LOG BOOK REPORT 2. FAULT ISOLATION REFERENCE
33 17 08 00	1. Any pilots caution & warning light(s) flashes continuously.
	2. 33-17-00 Fig. 105 Block 12
33 17 09 00	1. Any caution & warning light(s) remains off.
	2. 33-17-00 Fig. 105 Block 6
33 17 10 00	1. All caution & warning lights on, no flashing.
	2. 33-17-00 Fig. 105 Block 11
33 17 11 00	1. NOT USED.
33 17 12 00	1. NOT USED.
33 17 13 00	1. NOT USED.
33 17 14 00	1. NOT USED.
33 17 15 00	1. NOT USED.
33 17 16 00	1. NACELLE NO. 2 OVHT, OIL PRESS ENG 3, TURB AIR OVHT ENG 3, RUDDER MECH LMTR, ELECTRICAL SYSTEM, RAT DEPLOYED indicator light on; no other related system indicator(s) on.
	2. 33-17-00 Fig. 106 (Sheet 1) Block 10
33 17 17 00	1. FIRE DET LOOP, HYDRAULIC SYSTEM, NACELLE NO. 3 OVHT, LOW BRAKE PRESSURE, WHEEL WELL FIRE indicator light on; no other related system indicator(s) on.
	2. 33-17-00 Fig. 106 (Sheet 1) Block 12
33 17 18 00	1. FUEL SYSTEM indicator light on; no other related system indicator(s) on.
	2. 33-17-00 Fig. 106 (Sheet 1) Block 14

FAULT CODE INDEX
TABLE 1 (CONTINUED)

FAULT CODE	1. LOG BOOK REPORT 2. FAULT ISOLATION REFERENCE
33 17 19 00	1. NACELLE NO. 1 OVHT, TURB AIR OVHT ENG 1, TURB AIR OVHT ENG 2, ESS STBY PWR, AREA DUCT OVERHEAT, DOOR OPEN indicator light on; no other related system indicator(s) on.
	2. 33-17-00 Fig. 106 (Sheet 1) Block 16
33 17 20 00	1. ENG 2 FAIL-ARMED indicator light on; no other related system indicator(s) on.
	2. 33-17-00 Fig. 106 (Sheet 2) Block 11
33 17 21 00	1. OIL PRESS ENG 1, ECS, OIL PRESS ENG 2, indicator legend on; no other related system indicator(s) on.
	2. 33-17-00 Fig. 106 (Sheet 2) Block 17
33 17 22 00	1. NOT USED.
33 17 23 00	1. NOT USED.
33 17 24 00	1. NACELLE NO. 2 OVHT, OIL PRESS ENG 3, TURB AIR OVHT ENG 3, ELECTRICAL SYSTEM, RAT DEPLOYED indicator light on; no other related system indicator(s) on.
	2. 33-17-00 Fig. 106 (Sheet 1) Block 10 (032-999)
33 17 25 00	1. RUDDER HYDR LMTR, VERTICAL GYRO 3, ANTI SKID, BRAKE TEMP indicator light on; no other related system indicator(s) on.
	2. 33-17-00 Fig. 106 (Sheet 2) Block 13
33 17 26 00	1. NOT USED.
33 17 27 00	1. NOT USED.
33 17 28 00	1. NOT USED.
33 17 29 00	1. NOT USED.
33 17 30 00	1. NOT USED.

FAULT CODE INDEX
TABLE 1 (CONTINUED)

FAULT CODE	1. LOG BOOK REPORT 2. FAULT ISOLATION REFERENCE
33 17 31 00	1. NOT USED.
33 17 32 00	1. RUDDER HYDR LMTR, ANTI SKID, BRAKE TEMP, ATT 3 indicator light on; no other related system indicator(s) on. 2. 33-17-00 Fig. 106 (Sheet 2) Block 13
33 17 33 00	1. NOT USED.
33 17 34 00	1. NOT USED.
33 17 35 00	1. NOT USED.
33 17 36 00	1. NOT USED.
33 17 37 00	1. NOT USED.
33 17 38 00	1. FLT CONT PANELS indicator light on; no other related system indicators on. 2. 33-17-00 Fig. 106 (Sheet 2) Block 15
33 51 01 __	1. (03=Power pack 1, 04=Power pack 2, 05=Power pack 3, 06=Power pack 4, 07=Power pack 5, 08=Power pack 6, 09=Power pack 7, 10=Power pack 8, 11=Power pack 9, 12=Power pack 10) some, not all, emergency lights powered from the same power pack, remain off when tested. 2. 33-51-00 Fig. 103 Block 16
33 51 02 __	1. (03=Power pack 1, 04=Power pack 2, 05=Power pack 3, 06=Power pack 4, 07=Power pack 5, 08=Power pack 6, 09=Power pack 7, 10=Power pack 8, 11=Power pack 9, 12=Power pack 10) all emergency lights powered from one power pack remain off. 2. 33-51-00 Fig. 103 Block 17

FAULT CODE INDEX
TABLE 1

FAULT CODE	1. LOG BOOK REPORT 2. FAULT ISOLATION REFERENCE
33 51 03 00	1. Emergency lights did not come on when EMERGENCY LIGHTING switch is turned on.
	2. 33-51-00 Fig. 103 Block 6
33 51 04 00	1. Emergency lights did not go off when EMERGENCY LIGHTING switch cycled to OFF then to ARM.
	2. 33-51-00 Fig. 103 Block 10
33 59 01 __	1. (03=Power Supply 1, 04=Power Supply 2, 05=Power Supply 3, 06=Power Supply 4, 07=Power Supply 5, 08=Power Supply 6, 09=Power Supply 7, 10=Power Supply 8, 11=Power Supply 9, 12=Power Supply 10). Some, not all emergency egress lighting powered from the same power supply remain off when tested.
	2. 33-59-00 Fig. 103 (Sheet 1) Block 7
33 59 02 __	1. (03=Power Supply 1, 04=Power Supply 2, 05=Power Supply 3, 06=Power Supply 4, 07=Power Supply 5, 08=Power Supply 6, 09=Power Supply 7, 10=Power Supply 8, 11=Power Supply 9, 12=Power Supply 10. All emergency egress lighting powered from one power supply remain off when tested.
	2. 33-59-00 Fig. 103 (Sheet 1) Block 7
33 59 03 00	1. Emergency egress lighting does not come on when EMERGENCY LIGHTING switch is turned on.
R	2. 33-59-00 Fig. 103 (Sheet 1) Block 4
33 59 04 00	1. Emergency egress lighting did not go off when EMERGENCY LIGHTING switch cycled to OFF then to ARM.
	2. 33-59-00 Fig. 103 (Sheet 1) Block 8

LIGHTS - DESCRIPTION AND OPERATION

1. General

The aircraft lighting system consists of the following subsystems:

Flight Station Lighting (Ref. 33-10-00)

Passenger Compartment Lighting (Ref. 33-20-00)

Cargo and Service Compartment Lighting (Ref. 33-30-00)

Exterior Lighting (Ref. 33-40-00)

Emergency Lighting (Ref. 33-51-00).

CR Emergency Egress Lighting (Ref. 33-59-00)

CR Fluorescent, incandescent and electroluminescent lights are used
CR for aircraft lighting. The sources and types of power used for
CR the lighting subsystems are specified in figure 1.

NOTE: Relamping procedure for specific components not covered in the Standard Practices Manual may be found in that particular components ATA section.

	AC BUS 1 EXTENSION	AC BUS 2 EXTENSION	AC BUS 3 EXTENSION	PASS SERV BUS 1L	PASS SERV BUS 1R	PASS SERV BUS 2L	PASS SERV BUS 2R	PASS SERV BUS 3L	FWD AC GND SERVICE	AC ESSENTIAL BUS	DC BUS 1	DC BUS 2	DC BUS 3	DC ESSENTIAL BUS	DC GND SERVICE BUS	DC GND SERV BUS EXT	DC STANDBY BUS
FLIGHT COMPARTMENT																	
INTEGRAL LIGHTING INSTRUMENTS & PANELS:																	
CAPTAIN										X							
FIRST OFFICER		X															
FE/SO INSTRUMENT			X														
FE/SO PANEL	X																
CENTER INSTRUMENT																	
PANEL & GLARESHIELD										X							
CENTER CONSOLE			X														
OVERHEAD AND EYEBROW	X																
CIRCUIT BREAKER PANELS			X														
EYE LOCATOR & APPROACH																	
CHART HOLDER	X																
STANDBY COMPASS															X		
FLOODLIGHTING																	
INSTRUMENT PANELS										X					X		
CENTER CONSOLE												X					
SIDE CONSOLES											X						
OVERHEAD								X									
LANDING GEAR																	
EMERGENCY CONTROL															X		
UTILITY LIGHTING													X				
THUNDERSTORM													X				
PASSENGER COMPARTMENT																	
AISLE LIGHTS												X			X		
SOFFIT AND SIDEWALL LIGHTING				X										X			
LUMINAIRE LIGHTS					X												
GALLEY AND MID CABIN SERVICE CENTER				X													
CROSS AISLE LIGHTS & BOARDING LIGHTS				X													
PASSENGER READING LIGHTS						X	X										
COAT CLOSET LIGHTS					X			X									
LAVATORY AND LAVATORY SIGN LIGHTING				X				X						X	X		
ORDINANCE SIGNS			X									X					
CABIN ATTENDANT WORK LIGHT						X											
PASSENGER CALL SYSTEM												X					
CARGO AND SERVICE COMPARTMENTS																	
CARGO COMPARTMENTS				X										X			
SERVICE COMPARTMENTS					X								X				
EXTERIOR LIGHTS																	
POSITION LIGHTS								X									
LANDING AND RUNWAY TURNOFF LIGHTS		X	X														
ANTI COLLISION LIGHTS										X			X				
STROBE AND WING FLOOD LIGHTS		X									X						
NOSE GEAR TAXI LANDING LIGHTS		X									X						
LOGO LIGHTS	X																
EMERGENCY LIGHTS																	
EMERGENCY LIGHTS BATTERY CHARGER										X							
POWER FAILURE SENSING													X				
EMERG. EGRESS LIGHTING BATTERY CHARGER													X				

MI-0000-33-5036

CR
CR

Lighting System Bus Matrix
Figure 1

FLIGHT STATION LIGHTING - DESCRIPTION AND OPERATION

1. General

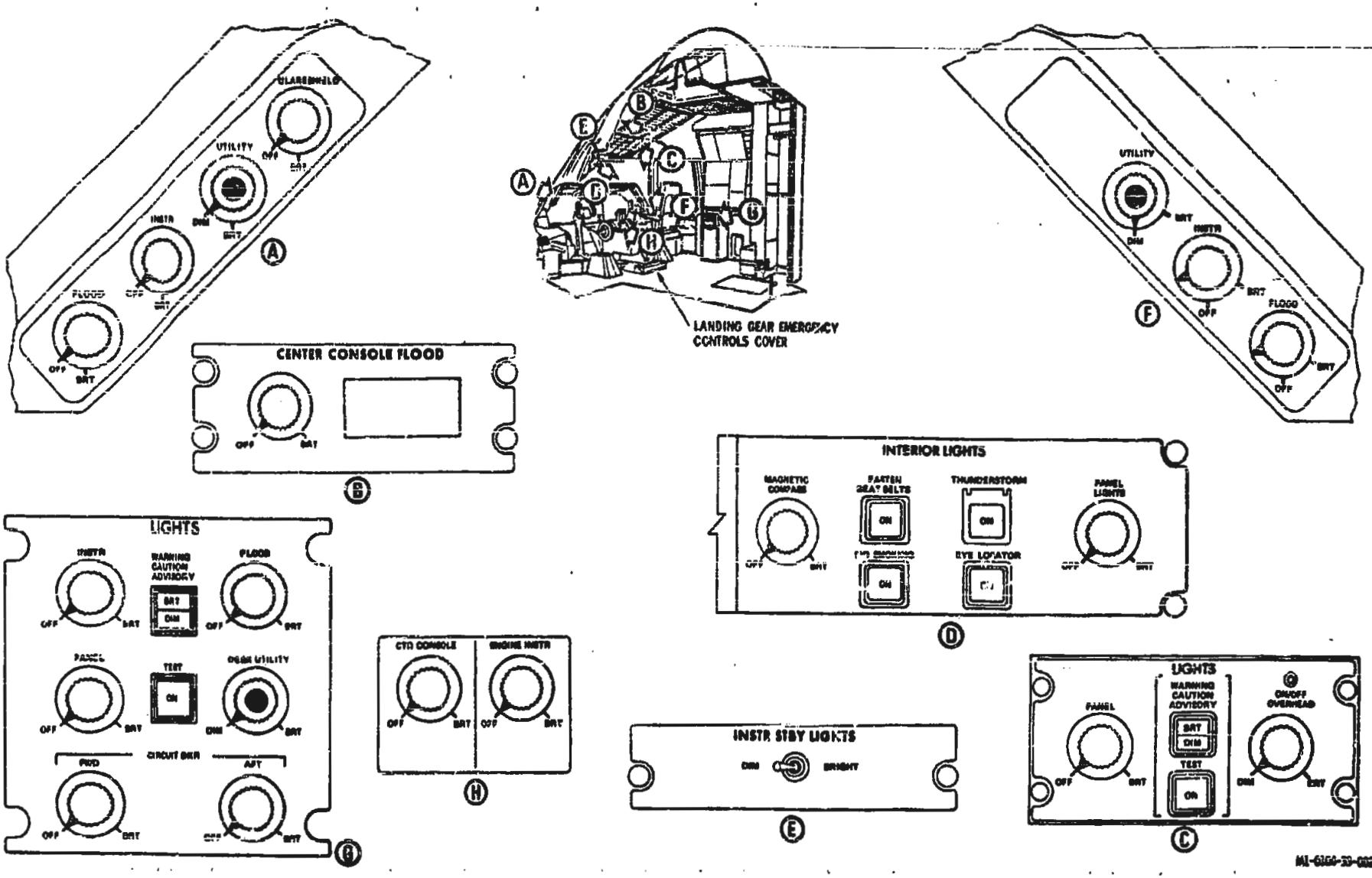
Flight station lighting includes overhead, panel and console flood, integral panel, instrument, advisory, and utility lights. Figure 1 shows the flight station lighting controls.

2. Thunderstorm Lights

A. Description and Operation

The thunderstorm lights circuit increases all the dimmed flight station lighting to maximum intensity to keep the flight crew from being intermittently blinded by lightning flashes while flying in a thunderstorm area. This circuit comprises nine relays (located in the forward electronics service center, zone 112) with all energizing coils connected in parallel (Ref. Fig. 2). The coil of each relay is shunted by an arc-suppression diode.

Electrical power from the 28V dc essential bus is applied through the THUNDERSTORM LT circuit breaker on panel CB3, zone 215, to the THUNDERSTORM switchlight on the eyebrow panel. Actuating this switch energizes all nine thunderstorm relays which switch all the flight station lights to full intensity, bypassing switches and intensity-control devices.

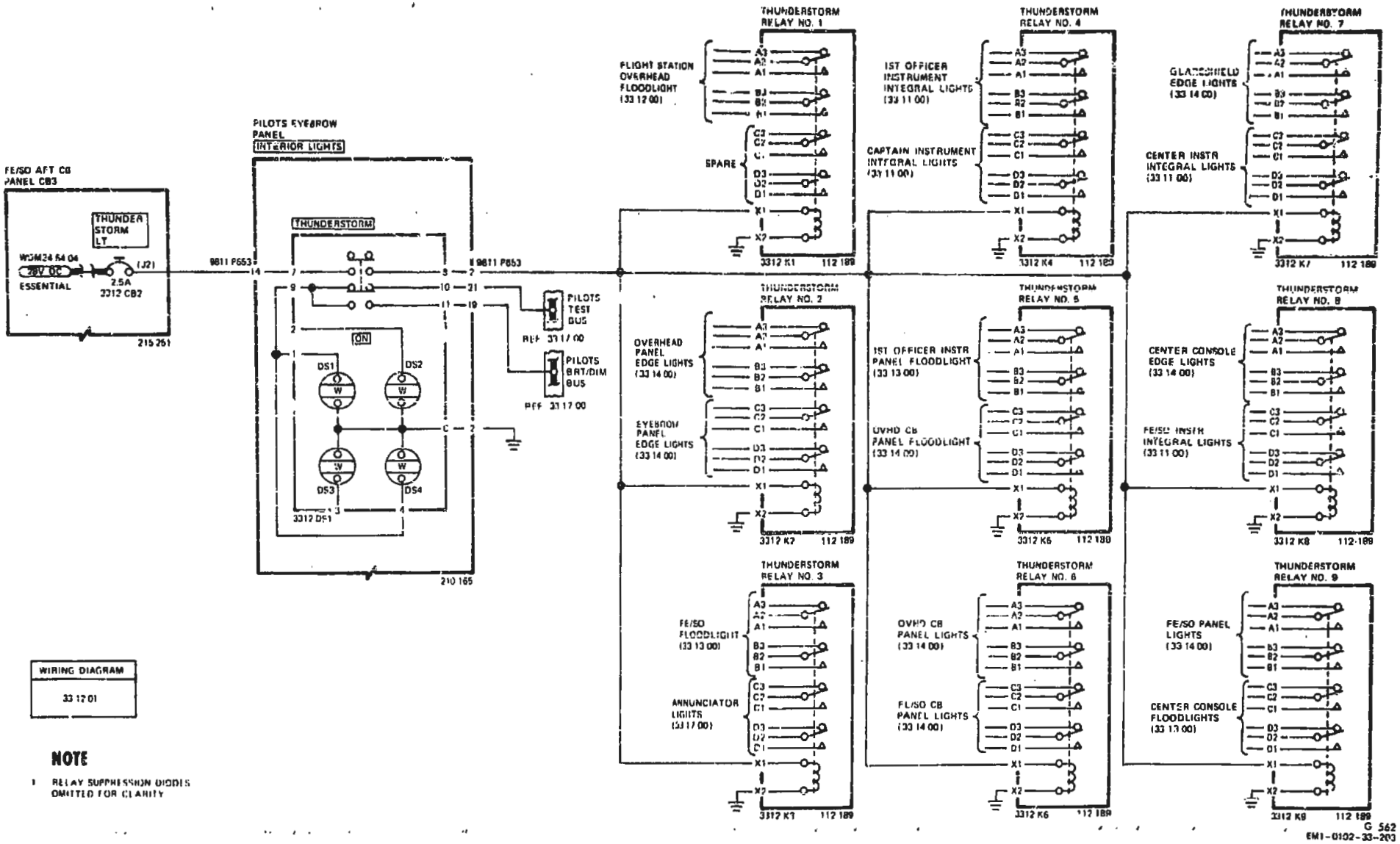


MI-6164-33-002

Flight Station Lighting Controls
Figure 1

EFFECTIVITY: ALL

0018



Thunderstorm Light Relays Schematic
Figure 2

EFFECTIVITY: ALL

FLIGHT STATION LIGHTING - ADJUSTMENT AND TEST

1. Referenced Procedure

24-00-00 Electrical Power - Maintenance Practices

2. Adjustment/Test

A. Operational Test

(1) Turn on electrical power (Ref. 24-00-00).

(2) On pilots overhead circuit breaker panel CB1, zone 210, verify that following circuit breakers are closed:

R STBY COMPASS (F8)

R INSTR PNL FLOOD (F9)

R 5 VAC INSTRUMENT LIGHTING (L19 thru L27)

(3) On Flight Engineer/Second Officers overhead circuit breaker panel CB2, zone 215, verify that following circuit breakers are closed:

R FLIGHT STATION LIGHTS (E1 thru E11)

R IND LT (G1 thru G10)

R 5 VAC PANEL LIGHTING (M1 thru M11)

(4) On Flight Engineer/Second Officers aft circuit breaker panel CB3, zone 215, verify that following circuit breakers are closed:

R STBY LT RELAY (J11)

R 5 VAC FLT ENGR INSTRUMENT PANEL (BB9 thru BB14)

R 5 VAC FLT ENGR PANEL LIGHTS (CC9 thru CC13)

(5) Operate each control listed in Table 501, and check that associated lighting responds.

Dimmable Light Controls
Table 501

CONTROL	LIGHTING
Left glareshield	
GLARESHIELD	Glareshield panels
UTILITY	Captains utility light
INSTR	Captains instrument and side console, observers consoles
FLOOD	Captains and center instrument panel flood
SIDE CONSOLE FLOOD (under glareshield)	Captains side console flood
Side console (on aircraft 032-999 only)	
FLIGHT KIT LIGHT	Flight kit light
CAPTAINS JEPPESEN FLOODLIGHT (on aircraft 032-999 only)	
Left Window Upper Sill	Jeppesen floodlight
Center console	
CTR CONSOLE	Center console panels
ENGINE INSTR	Center instruments
Overhead panel	
CENTER CONSOLE FLOOD	Center console flood
PANEL (on LIGHTS panel)	Overhead panel
OVERHEAD (ON/OFF, DIM/BRT)	Overhead flood
Eyebrow panel	
PANEL LIGHTS	Eyebrow panel
MAGNETIC COMPASS	Standby compass

Dimmable Light Controls (Cont)
Table 501

CONTROL	LIGHTING
Observer stations	
UTILITY	Utility lights
Right glareshield	
UTILITY	F/O utility light
INSTR	F/O instrument and side console
FLOOD	F/O instrument panel flood
SIDE CONSOLE FLOOD (under glareshield)	F/O side console flood
Side console (on aircraft 032-999 only)	
FLIGHT KIT LIGHT	Flight kit light
F/O JEPPESEN FLOODLIGHT (on aircraft 032-999 only)	
Right Window Upper Sill	Jeppesen floodlight
FE/SO LIGHTS panel	
INSTR	FE/SO instruments
PANEL	FE/SO panel lights
FLOOD	FE/SO panel flood
DESK UTILITY	FE/SO utility light
CIRCUIT BREAKER FWD	Pilots overhead circuit breaker panel CB1
CIRCUIT BREAKER AFT	FE/SO circuit breaker panels CB2 and CB3

(6) Check thunderstorm lights as follows:

(a) Operate THUNDERSTORM switchlight on eyebrow panel, zone 210, to ON. Switchlight must indicate ON,

and all panel, instrument, and floodlighting must go to maximum intensity.

(b) Operate THUNDERSTORM switchlight to off; all lighting must return to initial intensity.

(7) Operate EYE LOCATOR switchlight on eyebrow panel to ON. Switchlight must indicate ON and eye locator mounted on center windshield must come on. Operate switchlight to off.

(8) Check standby lights as follows:

R (a) On Flight Engineer/Second Officers vertical circuit breaker panel CB3, zone 215, open circuit
R breaker STBY LT RELAY (J-11). Pilots and Flight Engineer/Second Officers standby lights must come on.

(b) Operate INSTR STBY LIGHTS toggle switch on pilots overhead panel, zone 210. Standby lights must respond in intensity.

(c) Close circuit breaker opened in Step (8)(a).

(9) Lift landing gear emergency controls cover at lower aft side of pilots center console, zone 210; light must come on. Close cover.

(10) Check approach chart lighting as follows:

(a) Insert approach chart into receptacle on Captains control column. Vary control on approach chart and check that chart lighting responds in intensity.

(b) Repeat Step (a) with approach charts in Captains side console receptacle, zone 211, and in First Officers control column and side console receptacles, zone 212.

CAUTION: HIGH INTENSITY LIGHTING SHOULD NOT REMAIN ON FOR EXTENDED PERIODS WHEN NOT REQUIRED. SOME INSTRUMENTS ARE SUSCEPTIBLE TO DAMAGE DUE TO HIGH TEMPERATURES.

(11) On aircraft 001-031, turn all instrument and panel edge lighting controls to the dim or the full CCW position.

(11) On aircraft 032-999, check operation of Captains and First Officers Flight Kit lights as follows:

(a) On Captains or First Officers microphone holder panel, position flight kit light toggle switch to "ON".

(b) With flight kit light "ON" rotate intensity control CW and verify intensity increases.

(c) Repeat steps (a) and (b) for First Officers Flight Kit Light.

(12) On aircraft 001-031, turn off electrical power (Ref. 24-00-00).

(12) On aircraft 032-999, turn all instrument and panel edge lighting controls to the dim or full CCW position.

(13) On aircraft 032-999, turn off electrical power (Ref. 24-00-00).

INTEGRAL INSTRUMENT LIGHTING - DESCRIPTION AND OPERATION

1. General

Flight station instruments are integrally lighted with low-voltage lamps (Ref. Fig. 1). Similar integral lighting is provided for control panels (Ref. 33-14-00). A typical integral lighting 5V ac bus circuit is shown in Figure 2.

2. Dimmer

A. Description and Operation

R The incandescent lamp dimmer is a solid-state device which controls integral lighting intensity. Dimmer input voltage is 115V ac; output voltage can be varied between 0.75 and 5.00V ac. All inputs to the dimmer are through a connector; the outputs (low-voltage and ground) are through terminal posts. A total of 11 dimmers of 4 different types are used in the integral instrument and panel lighting systems. The dimmers are located in the forward electronic service center, zone 112, at the left side of the flight station, zone 211, and at the Flight Engineers/Second Officers station, zone 215 (Ref. Fig. 3). The four types of dimmers vary in power output as follows:

Type	Rating
I	50VA
II	100VA
III	150VA
IV	300VA

The dimmer is controlled by a rheostat and a thunderstorm relay (Ref. Fig. 2). The dimmer output voltage, which is sensed at the 5V ac instrument bus, is also fed back to the dimmer control circuit.

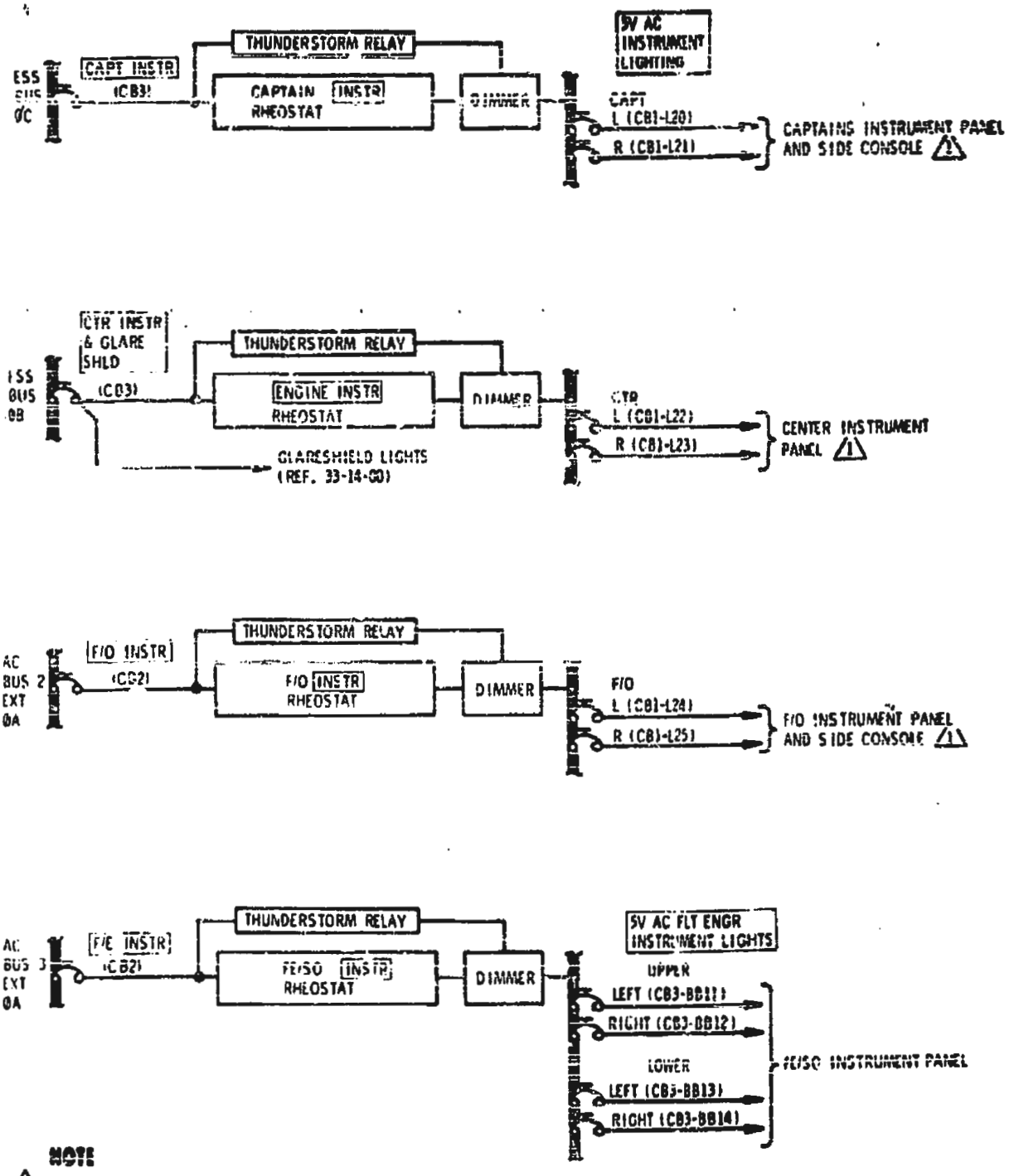
3. Rheostat

A. Description

A light control rheostat is provided for each dimmer. The rheostat has an integral on/off switch.

4. Magnetic Compass Lighting

A. Description and Operation



NOTE

1 INCLUDES BOTH INSTRUMENT AND PANEL INTEGRAL LIGHTING

HH 8320
EM1-010-33-227

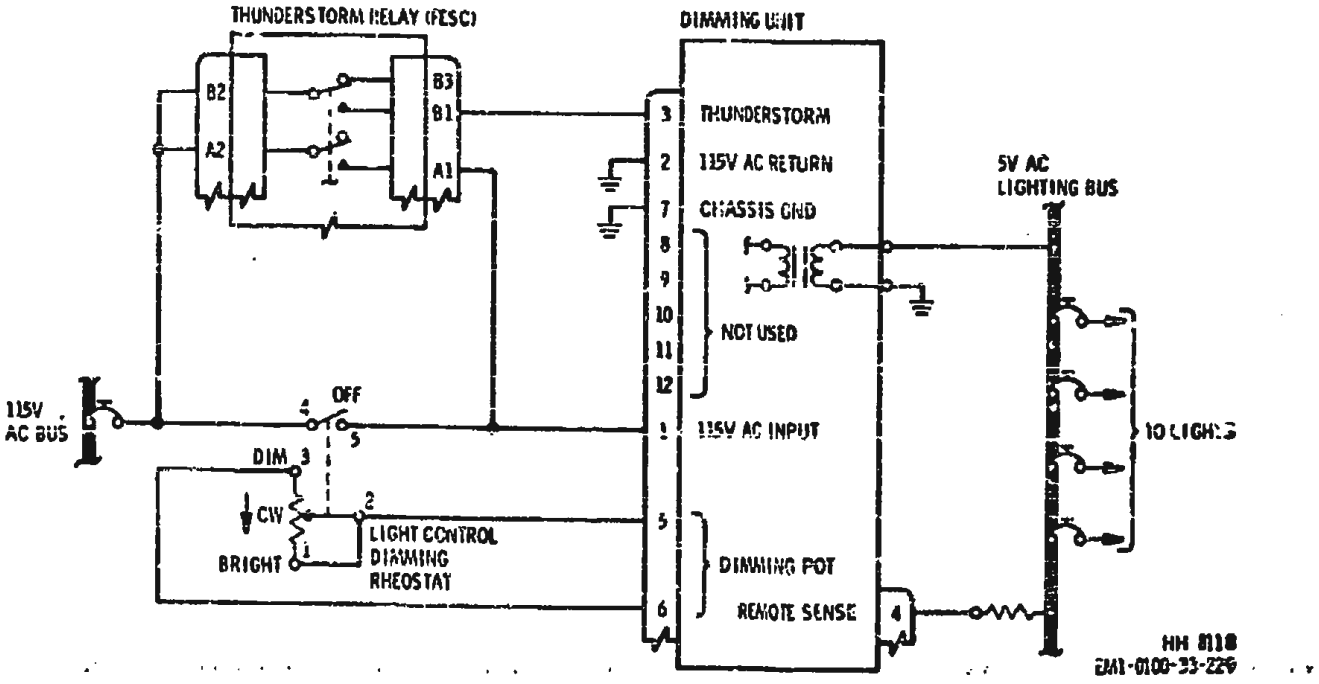
R Integral Instrument Lighting
R Figure 1

The standby magnetic compass is illuminated by an incandescent lamp located in the compass housing. A control marked MAGNETIC COMPASS on the eyebrow panel, zone 210, is used to change the lighting intensity (Ref. Fig. 4).

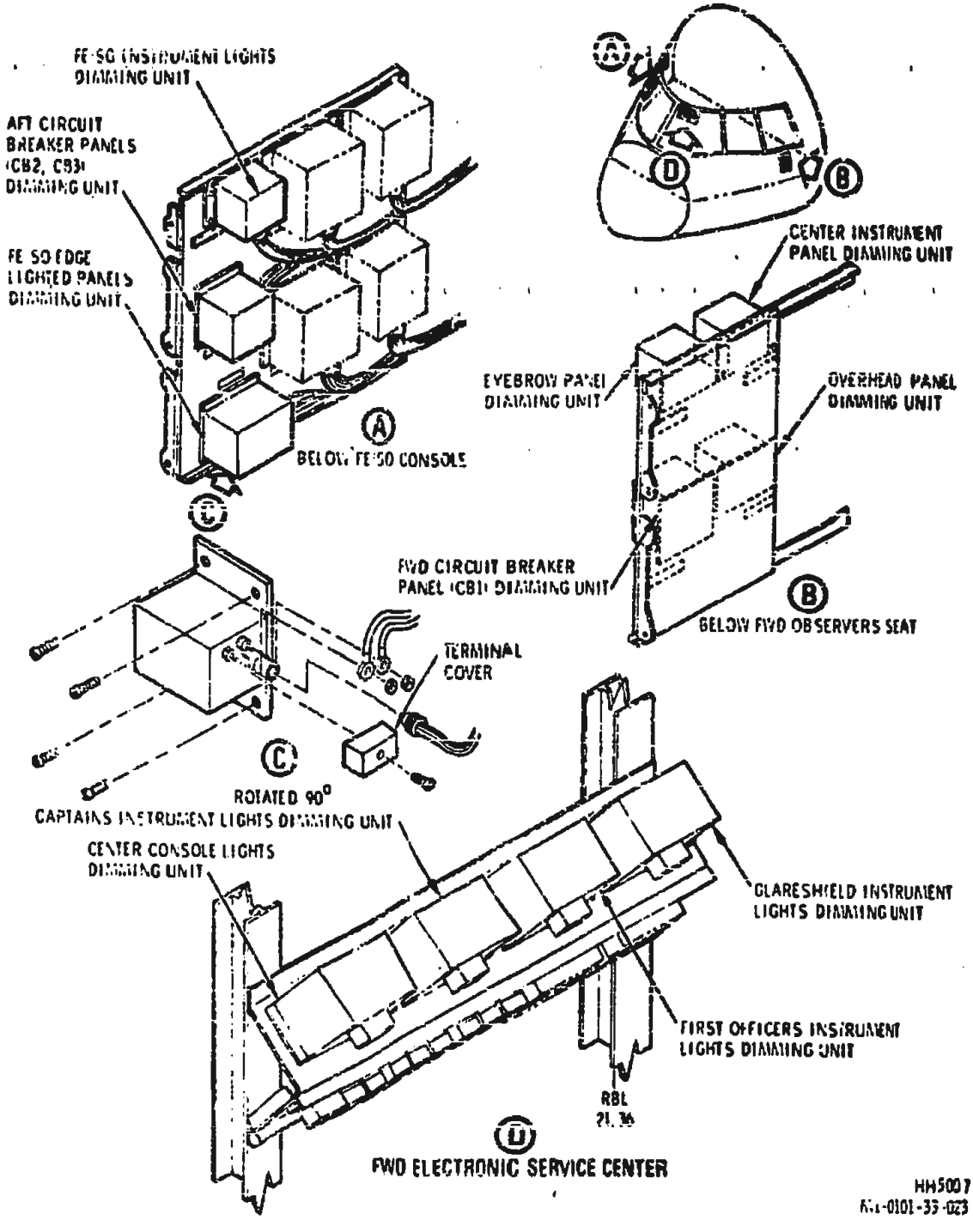
R 5. Standby Horizon Lighting

R A. Description and Operation

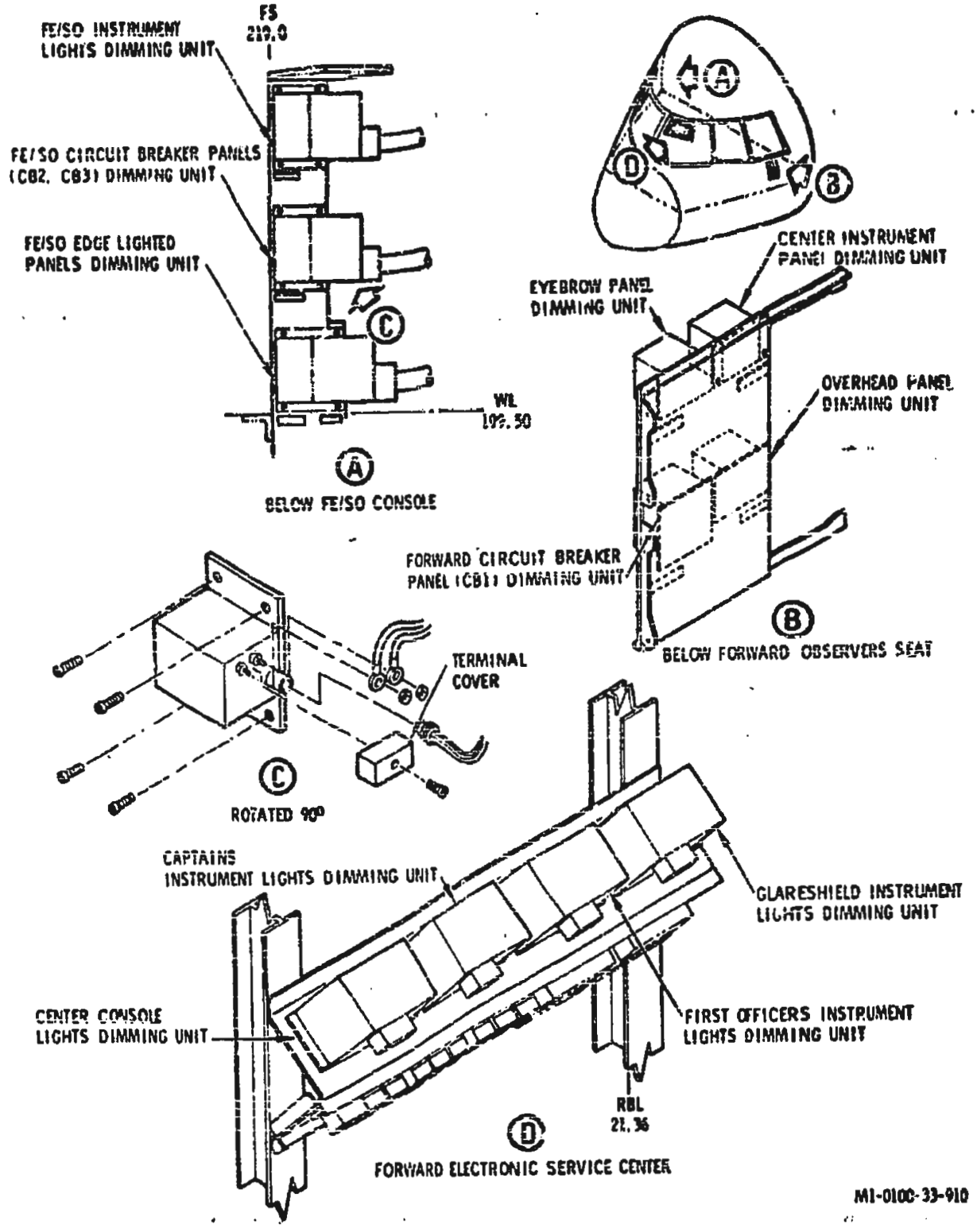
R The standby horizon indicator instrument lighting has in
R addition to the normal 0-5V ac instrument lighting source, a
R 3V ac nondimmable standby source. The ac standby bus
R provides 115V ac to the standby horizon lights transformer
R (Ref. Fig. 5) zone 113, which provides 3V ac to the standby
R horizon indicator when the standby floodlight relay, zone
R 112, senses a loss of the dc essential bus.



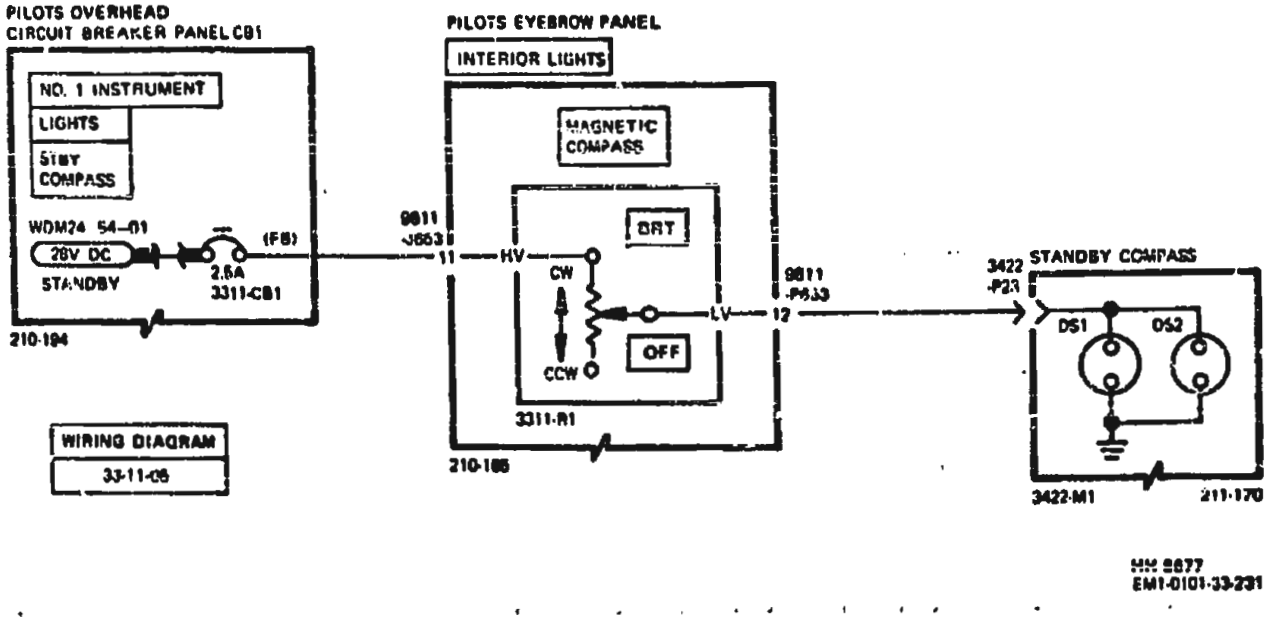
Typical Integral Lighting Circuit
Figure 2



Light Dimmers
Figure 3

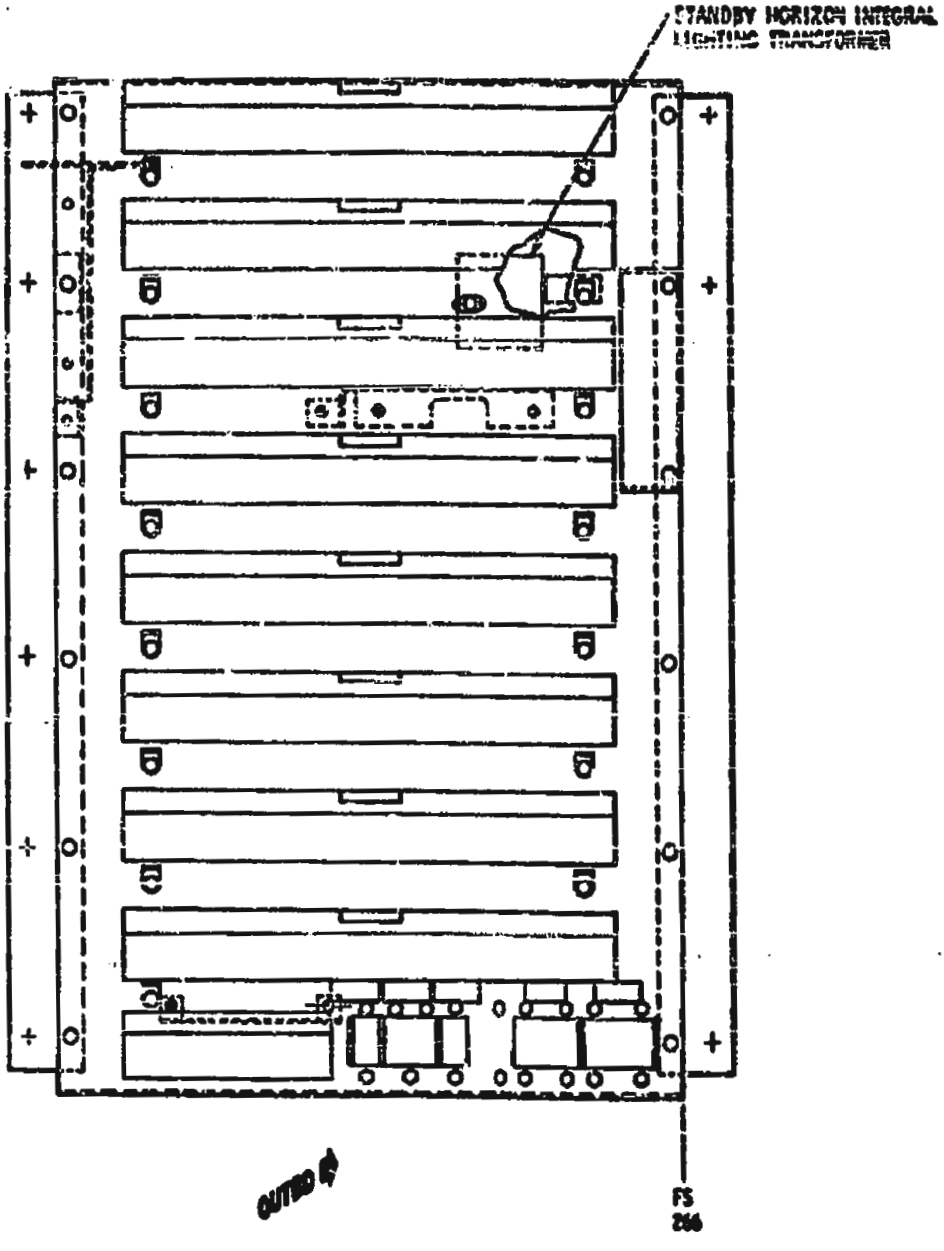


Light Dimmers
Figure 3



HM 2877
EM1-0101-33-231

Magnetic Compass Lighting Schematic
Figure 4



Standby Horizon Lights Transformer Location
Figure 5

R # Integral Instrument Lighting - FAULT ISOLATION

R 1. General

R Reference data and fault isolation procedures for troubleshooting Integral Instrument Lighting faults are included in this section of the manual. An Integral Instrument Lighting malfunction detected by the flight crew is normally entered in the aircraft flight log book and reported to maintenance personnel by a FIRM fault code number. This number and the flight log book write-up can be found in the Chapter 33 Fault Code Index. The index specifies the maintenance manual section, fault isolation diagram figure number and, where appropriate, a block number indicating the entry point containing the fault isolation procedure. When no block number is specified, the entry point is block 1.

R Prerequisites listed at the top of each diagram identify mandatory preliminary steps and circuit breakers that must be closed before initiating any fault isolation step.

R Schematic diagrams, identified by a SCHEM number, supplement fault isolation procedures as maintenance aids. The schematics show the basic system circuitry necessary for troubleshooting and include cross-reference indexes to the wiring diagram manual pages required for checking component interconnect wiring.

R 2. Fault Isolation/Identification

R Table 101 lists the fault isolation diagrams and schematics in this section.

R Table 101

FIGURE	TITLE
101	Component Location Index
102	Component Locator Diagram
SCHEM 1	Captains Integral Instrument and Side Console Lighting Schematic
SCHEM 2	Center Instrument Panel Integral Instrument Lighting Schematic

(Cont)
Table 101

FIGURE	TITLE
SCHEM 3	First Officers Integral Instrument and Side Console Lighting Schematic
SCHEM 4	Flight Engineer/Second Officers Integral Instrument Lighting Schematic

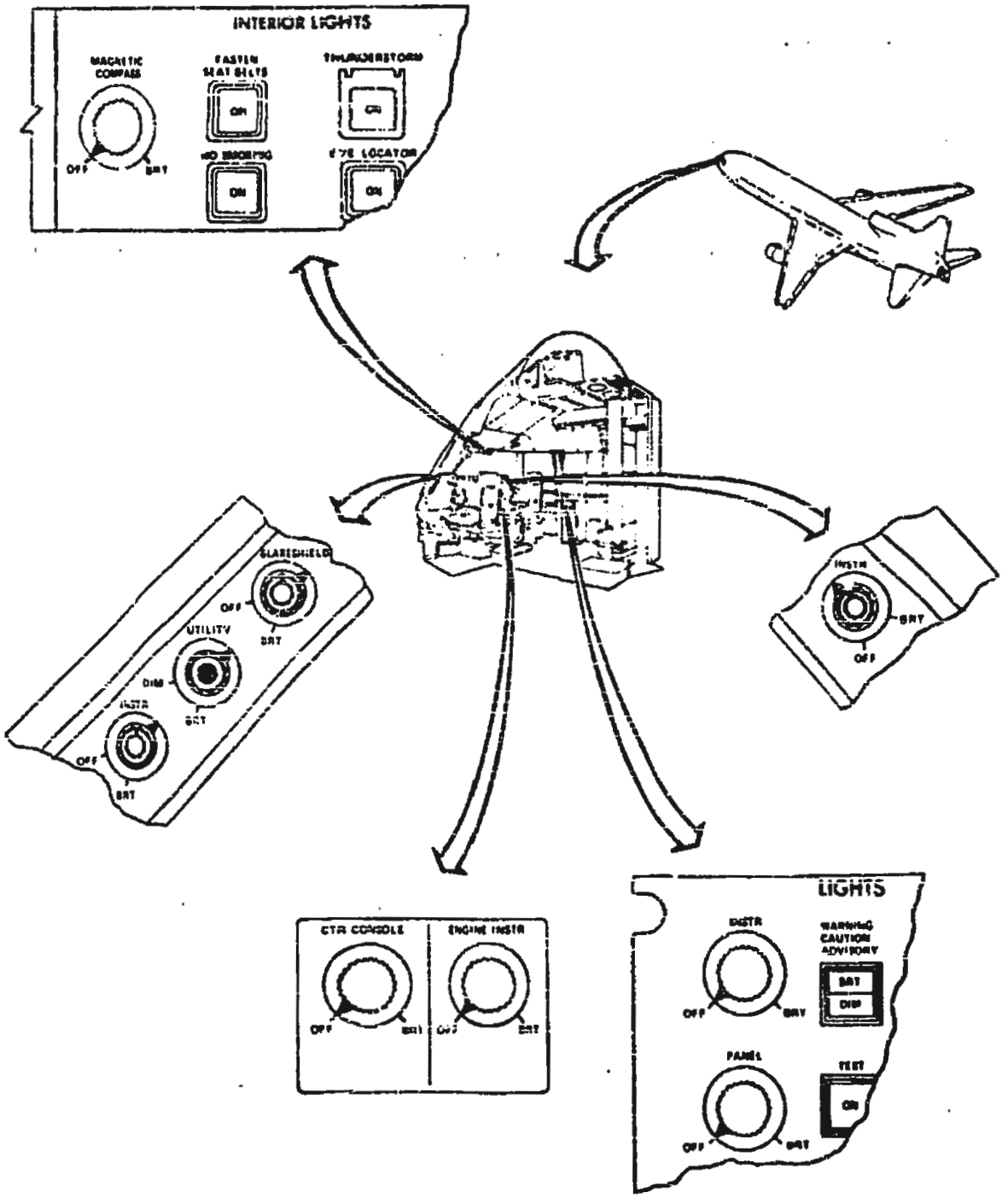
COMPONENT	QTY	AREA/ACCESS	REFERENCE
CIRCUIT BREAKERS			
CAPTAINS INSTR 3310-CB1	1	FLT STA/CB3 J12	•
CENTER INSTR & GLARESHIELD 3310-CB6	1	FLT STA/CB3 J13	•
FIRST OFFICERS INSTR 3310-CB2	1	FLT STA/CB2 E5	•
FLT ENGINEERS INST 3311-CB7	1	FLT STA/CB2 E9	•
5 VAC FLT ENGINEER INSTR PANEL			
LOWER LEFT 3311-CB11	1	FLT STA/CB3 BB13	•
LOWER RIGHT 3311-CB10	1	FLT STA/CB3 BB14	•
UPPER LEFT 3311-CB8	1	FLT STA/CB3 BB11	•
UPPER RIGHT 3311-CB9	1	FLT STA/CB3 BB12	•
5 VAC INSTRUMENT LIGHTING			
CAPTAIN LEFT 3310-CB3	1	FLT STA/CB1 L20	•
CAPTAIN RIGHT 3310-CB10	1	FLT STA/CB1 L21	•
CENTER LEFT 3311-CB14	1	FLT STA/CB1 L22	•
CENTER RIGHT 3310-CB7	1	FLT STA/CB1 L23	•
FIRST OFFICER LEFT 3310-CB11	1	FLT STA/CB1 L24	•
FIRST OFFICER RIGHT 3310-CB1	1	FLT STA/CB1 L25	•
STANDBY HORIZON LIGHT 3311-CB25	1	FLT STA/CB1 F7	•
3 VAC STANDBY HORIZON LIGHT 3311-CB26	1	FLT STA/CB1 J27	•
STANDBY LIGHT RELAY 3313-CB3	1	FLT STA/CB3 J11	•
DIMMER – CAPTAINS INSTRUMENT PANEL 3310-A2	1	FESC RH ELECTRICAL RACK/112AB	33-14-10
DIMMER – CENTER INSTRUMENT PANEL 3310-A3	1	FLT STA CAPTAINS SIDE CONSOLE/ P14	33-14-10
DIMMER – FIRST OFFICERS INSTRUMENT PANEL 3310-A1	1	FESC RH ELECTRICAL RACK/112AB	33-14-10
DIMMER – FE/SO INSTRUMENT PANEL 3311-A2	1	FLT STA FIRST OFFICERS SIDE CONSOLE/P15	33-14-10
RELAY – INSTRUMENT STANDBY FLOODLIGHT 3313-K1	1	FESC RH ELECTRICAL RACK/112AB	20-24-01
RELAY – NO. 4 THUNDERSTORM 3312-K4	1	FESC RH ELECTRICAL RACK/112AB	20-24-01
RELAY – NO. 7 THUNDERSTORM 3312-K7	1	FESC RH ELECTRICAL RACK/112AB	20-24-01
RELAY – NO. 8 THUNDERSTORM 3312-K8	1	FESC RH ELECTRICAL RACK/112AB	20-24-01
RHEOSTAT – CAPTAINS INSTRUMENT PANEL 3310-R3	1	FLT STA CAPTAINS GLARESHIELD	
RHEOSTAT – CENTER INSTRUMENT PANEL 3310-R6	1	FLT STA CENTER CONSOLE	
RHEOSTAT – FIRST OFFICERS INSTRUMENT PANEL 3310-R1	1	FLT STA FIRST OFFICERS GLARESHIELD	
RHEOSTAT – FE/SO INSTRUMENT PANEL 3311-R1	1	FLT STA FE/SO INSTRUMENT PANEL	
RHEOSTAT – GLARESHIELD	1	FLT STA PILOTS EYEBROW PANEL	
TRANSFORMER – STANDBY HORIZON LIGHT	1	FESC ANNUNCIATOR LIGHTS CONTROL PANEL/112AB	

*SEE WM EQUIPMENT LIST

M1-0000-33-1252

R R Component Location Index
Figure 101

R R 0018 EFFECTIVITY: ALL

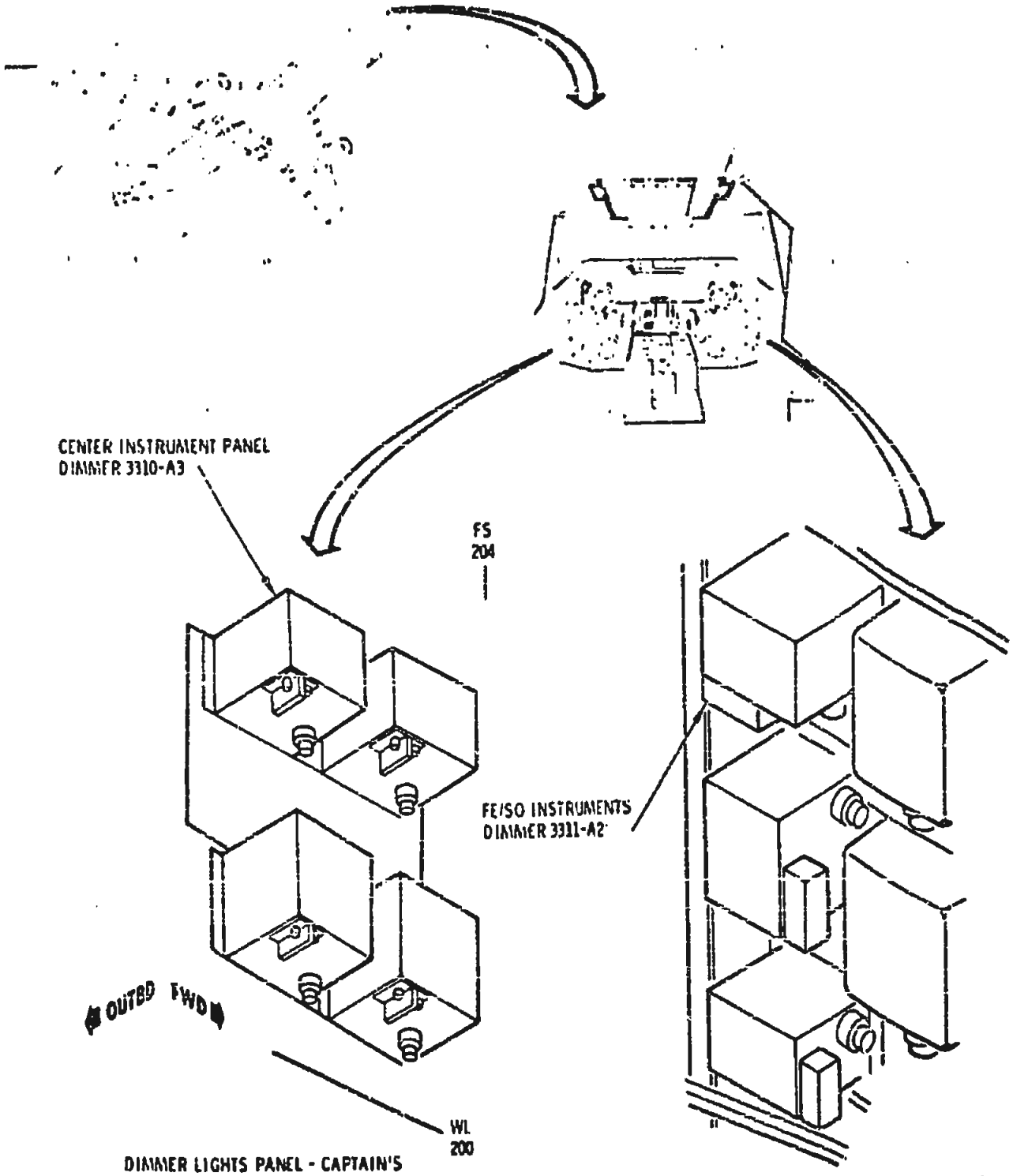


M1-0000-33-1253

Component Locator Diagram
Figure 102 (Sheet 1)

EFFECTIVITY: ALL

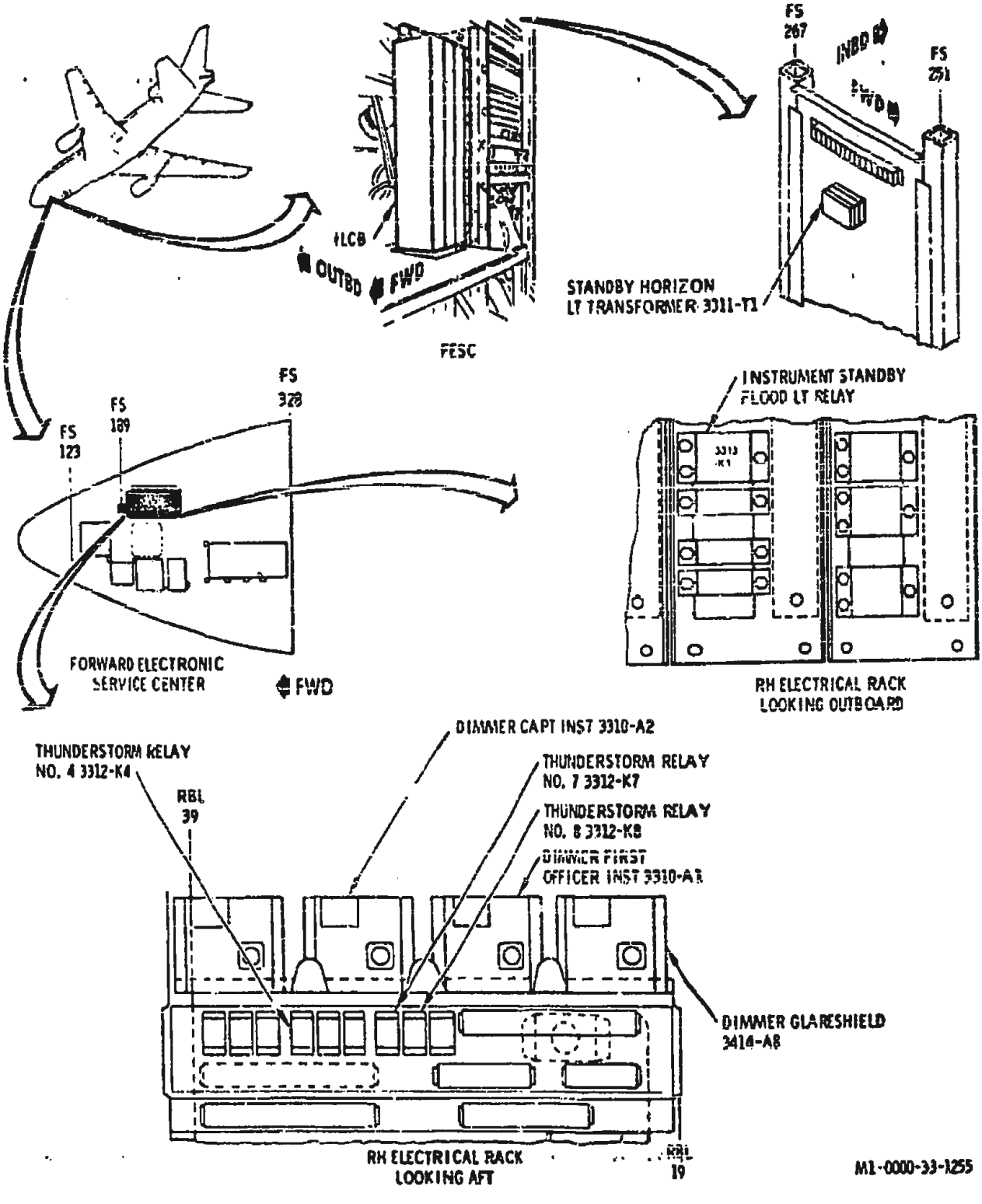
0018



R R Component Locator Diagram
Figure 102 (Sheet 2)

R R EFFECTIVITY: ALL

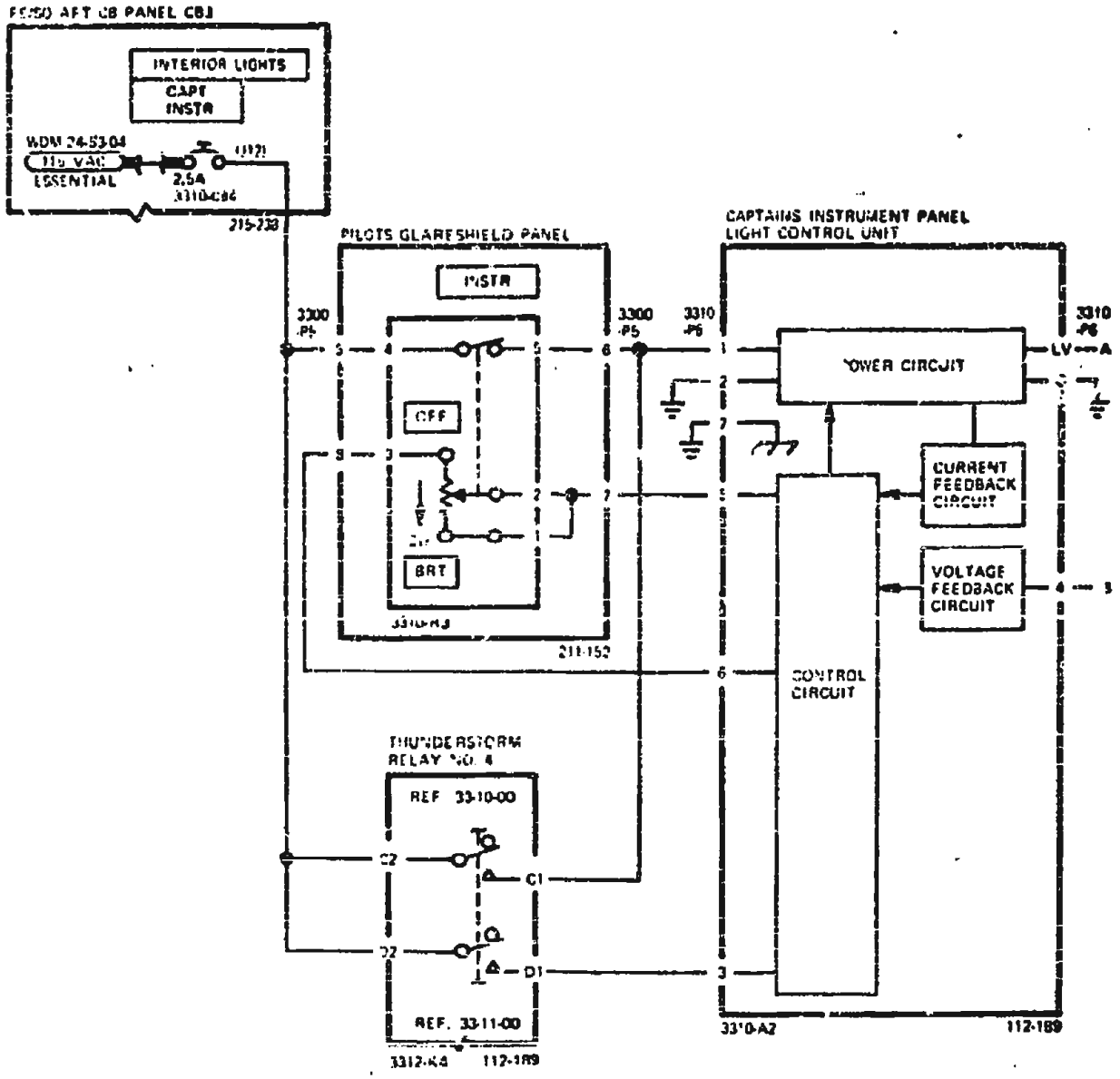
0018



R R Component Locator Diagram
Figure 102 (Sheet 3)

R R EFFECTIVITY: ALL

001B



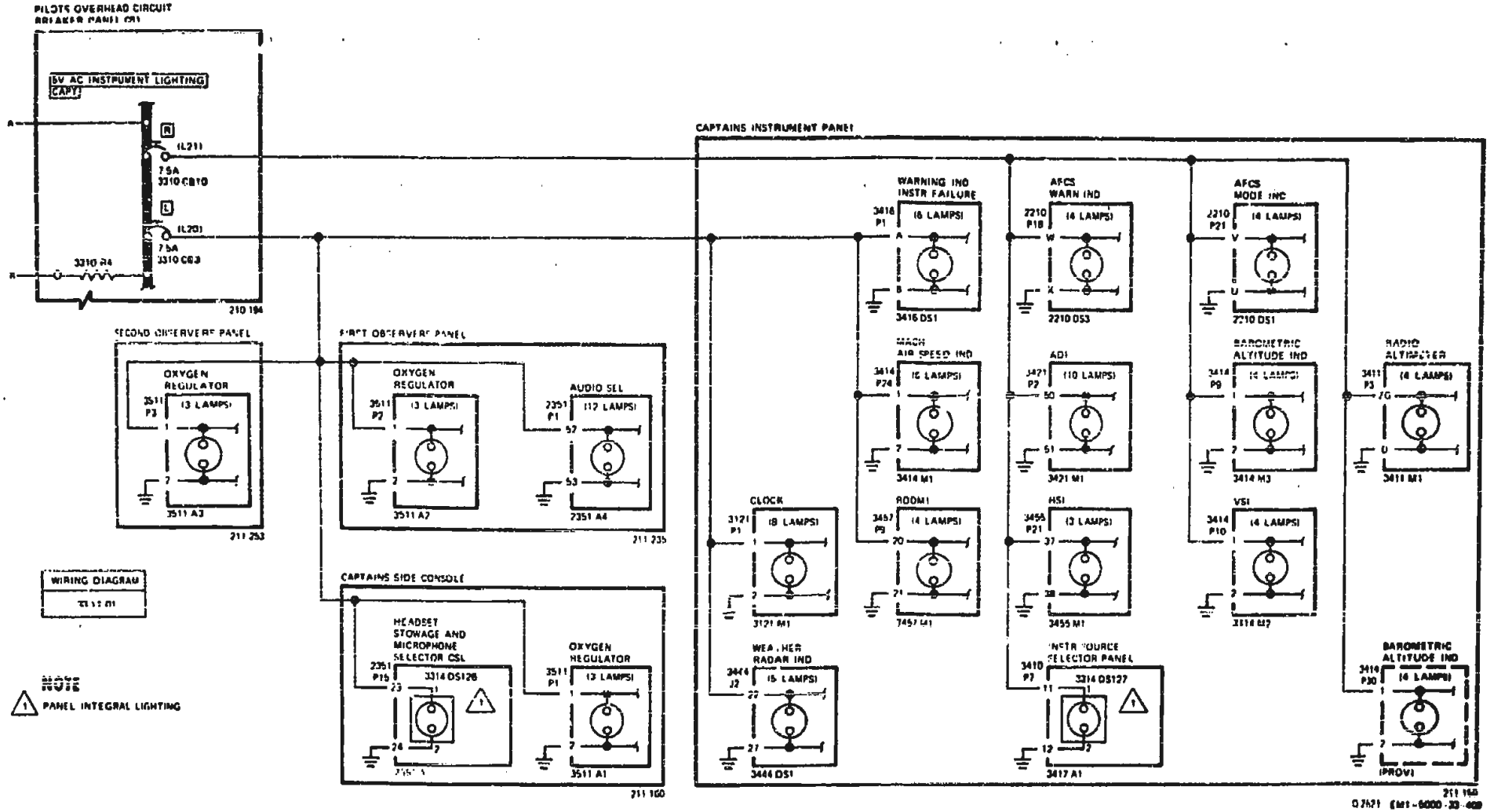
WIRING DIAGRAM
33-11-01

11A 2043
EM1-5010-33-084

R Captains Integral Instrument and Side Console Lighting Schematic
R SCHEM 1 (Sheet 1)

EFFECTIVITY: ALL

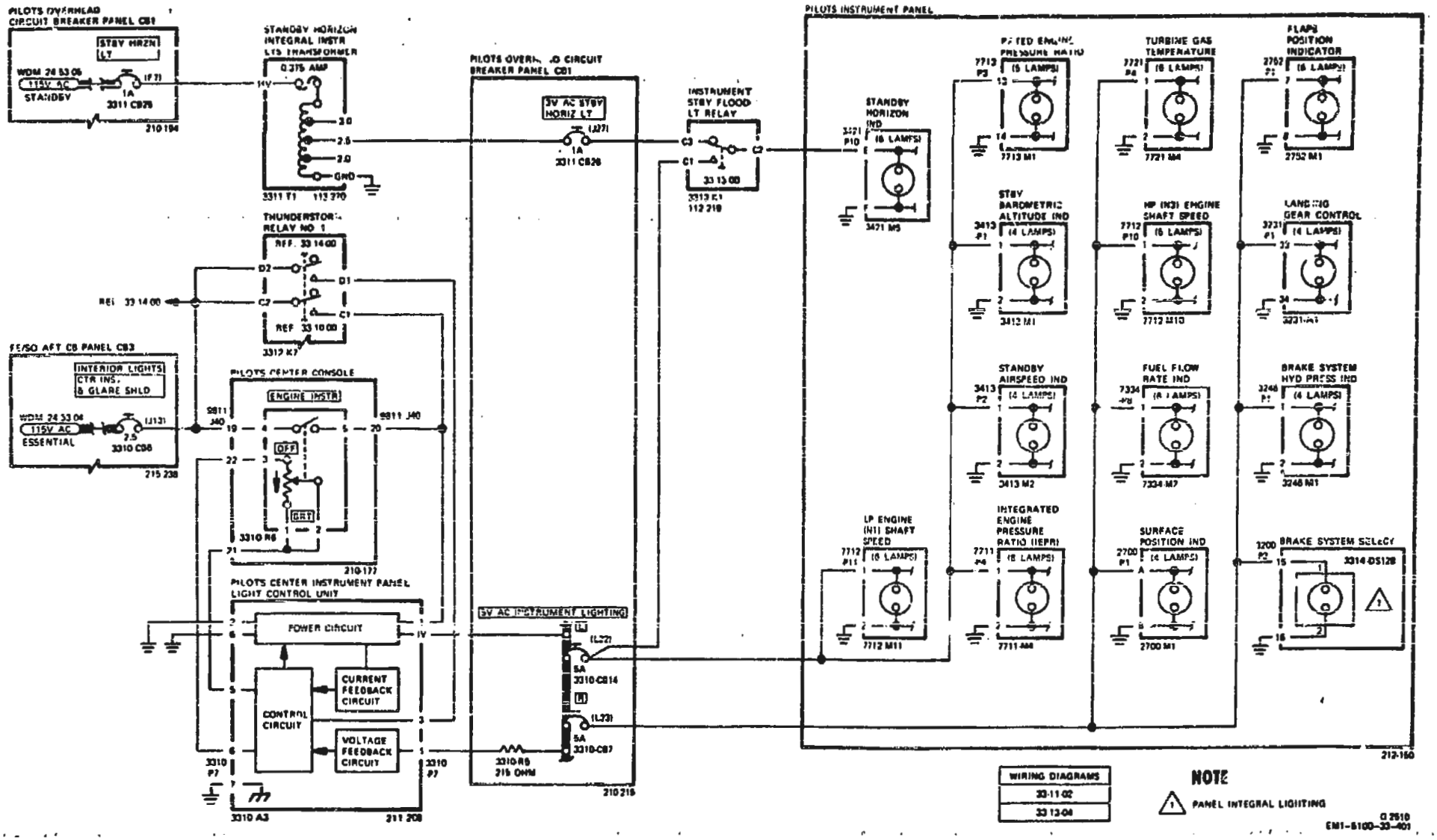
001B



R Captains Integral Instrument and Side Console Lighting Schematic
R SCHEM 1 (Sheet 2)

EFFECTIVITY: ALL

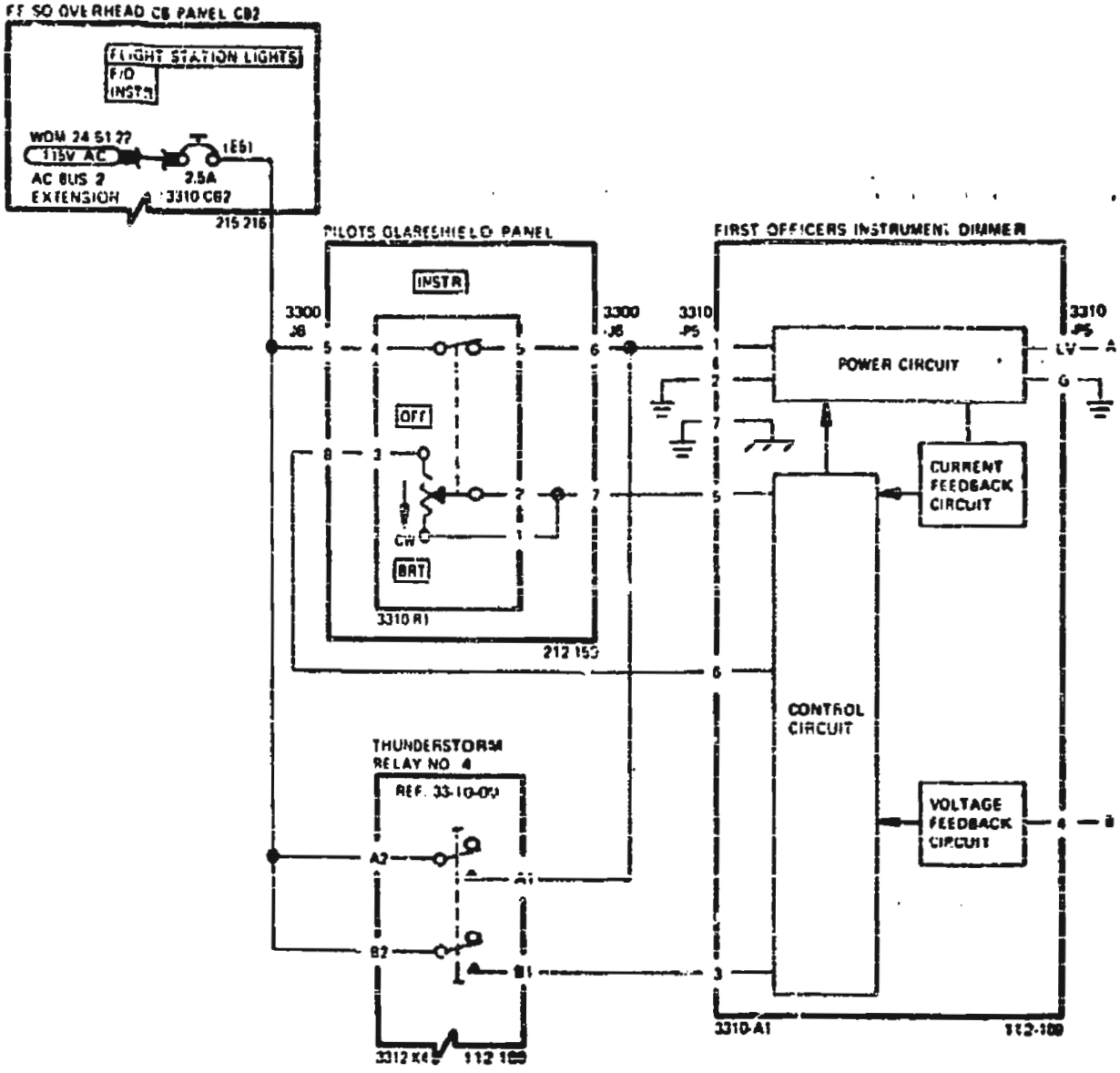
001B



R Center Instrument Panel Integral Instrument Lighting Schematic
R SCHEM 2

EFFECTIVITY: ALL

0018



1 NOTE
INTEGRAL PANEL LIGHTING

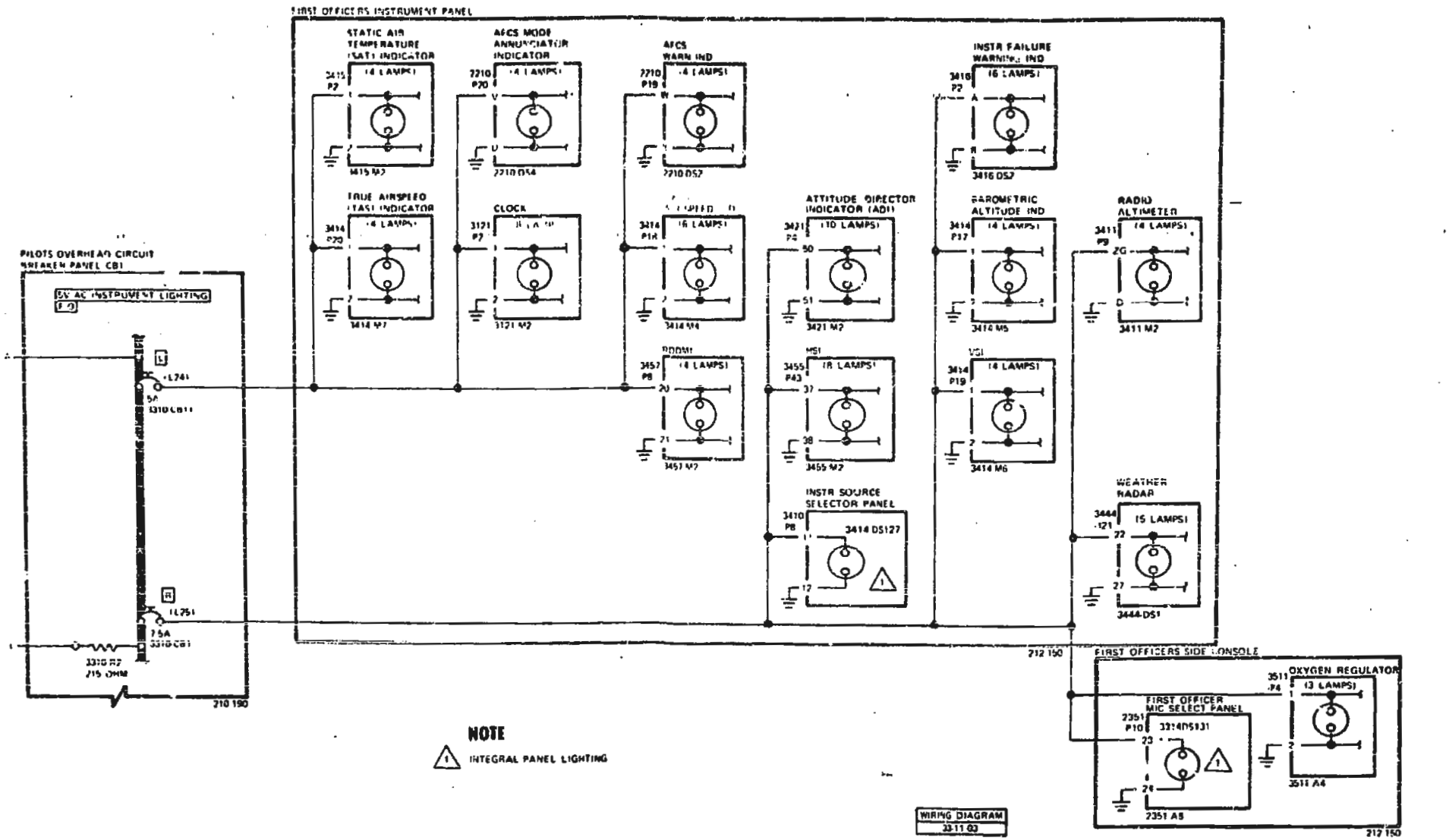
WIRING DIAGRAM
33-11-03

HA2130
EMI-5000-33-411

R First Officers Integral Instrument and Side Console
R Lighting Schematic
R SCHEM 3 (Sheet 1)

EFFECTIVITY: ALL

001B



NOTE

1. INTEGRAL PANEL LIGHTING

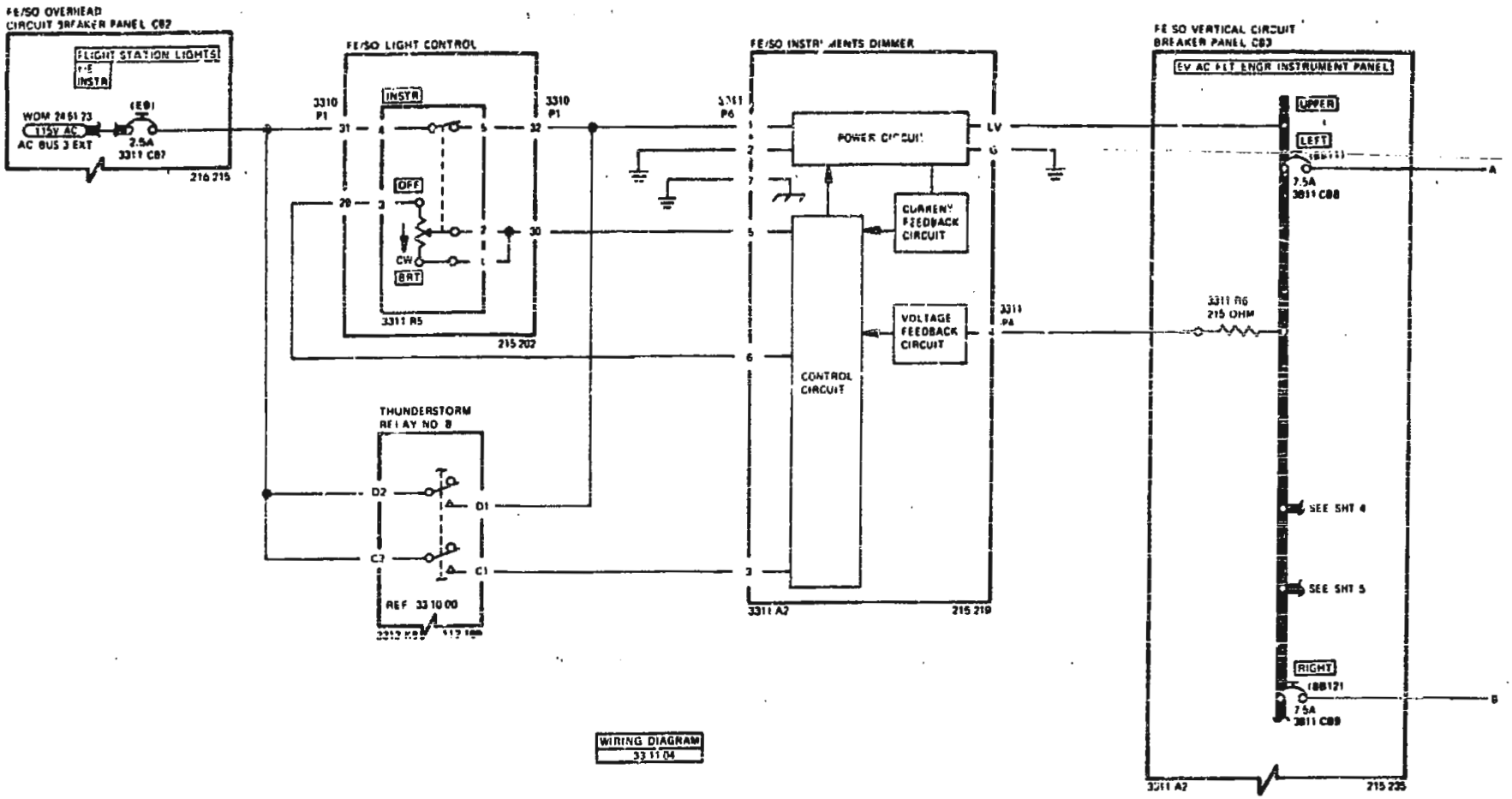
WIRING DIAGRAM 33-11-00

G 2561
EMI 5000 33 422

R R R First Officers Integral Instrument and Side Console Lighting Schematic SCHEM 3 (Sheet 2)

EFFECTIVITY: ALL

0018

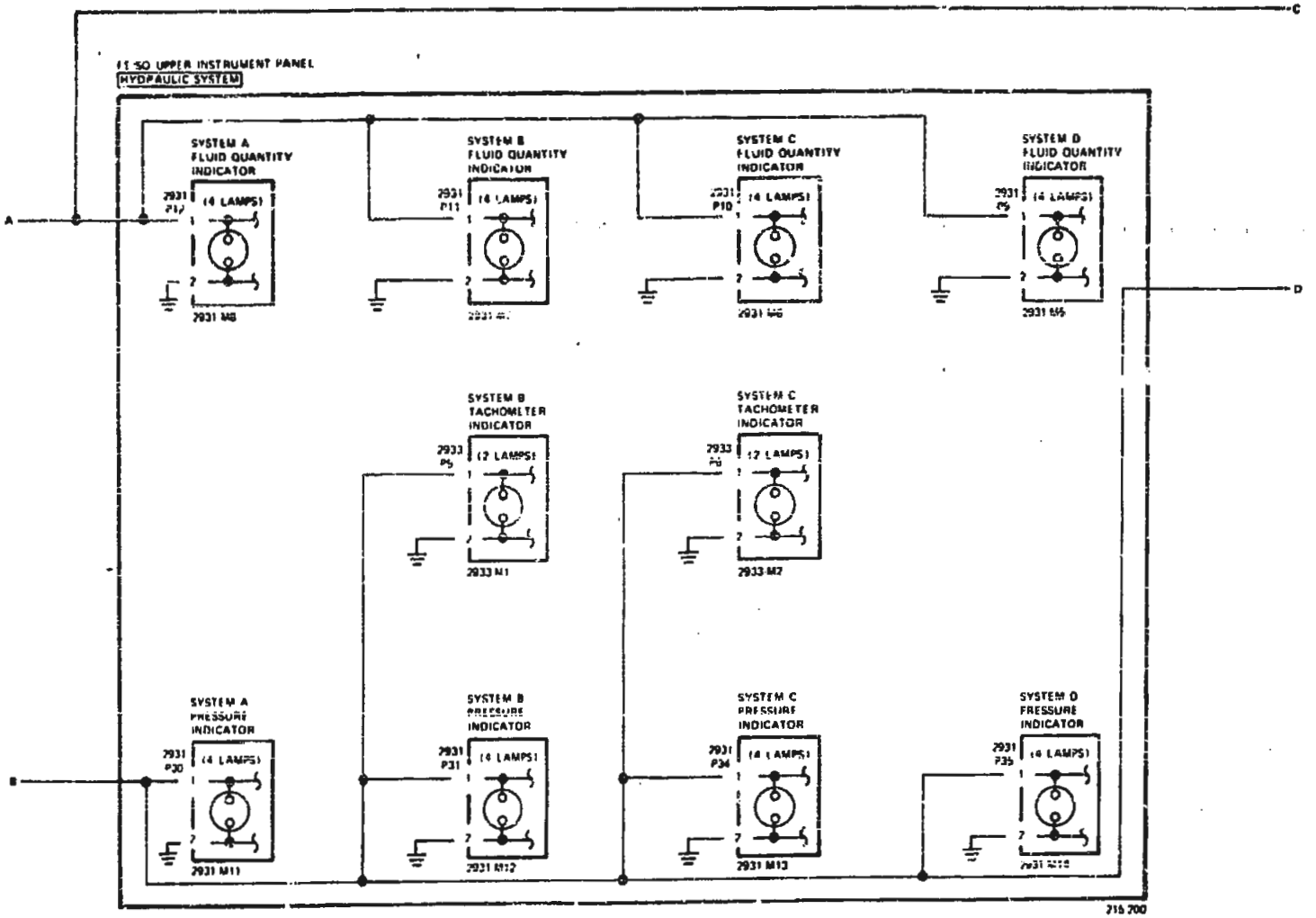


G 2500
EMI-5000-33-418

R Flight Engineer/Second Officers Integral Instrument
R Lighting Schematic
R SCHEM 4 (Sheet 1)

EFFECTIVITY: ALL

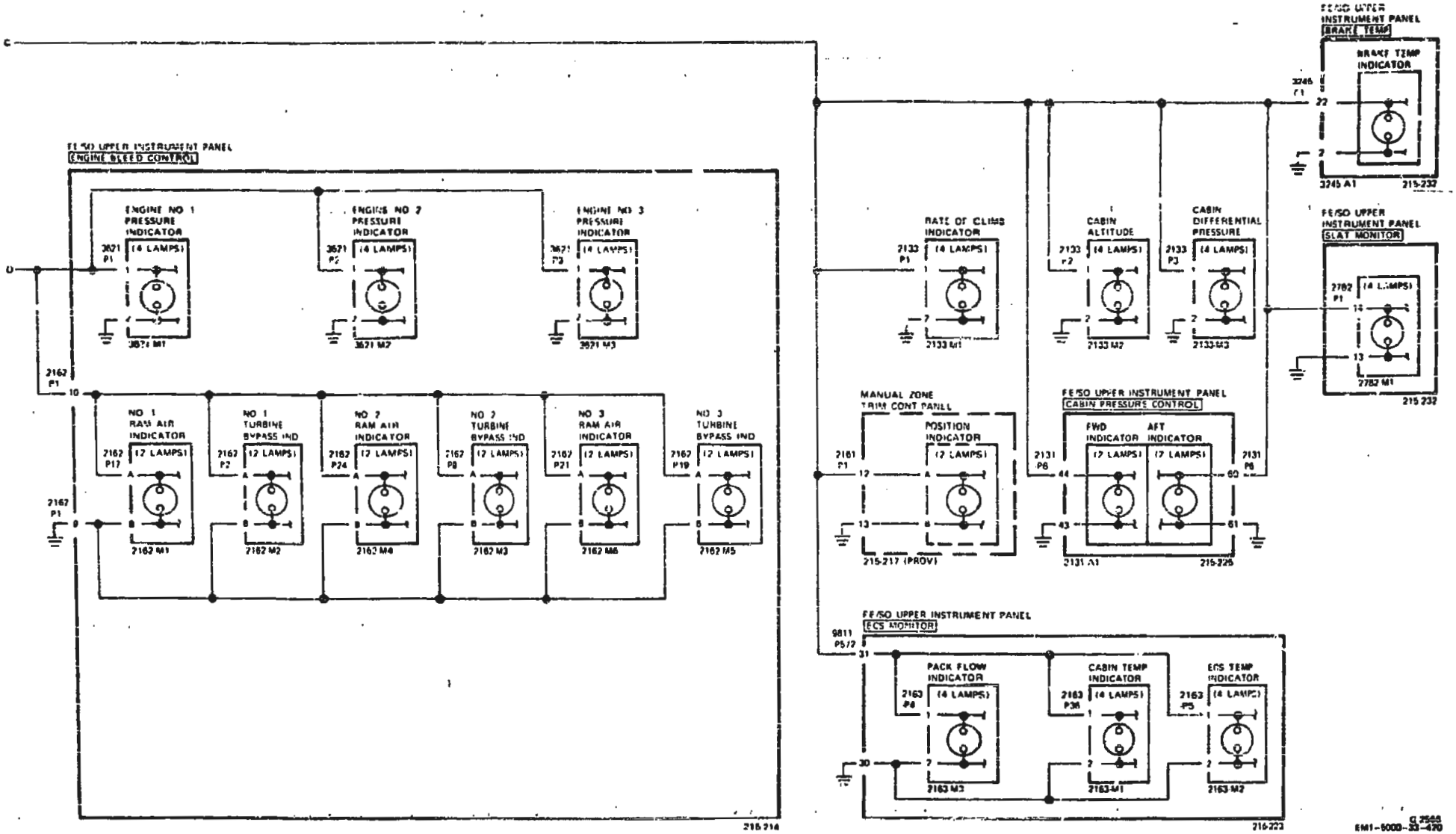
0016



G 2669
EM1 5000 33 419

R Flight Engineer/Second Officers Integral Instrument
R Lighting Schematic
R SCHEM 4 (Sheet 2)

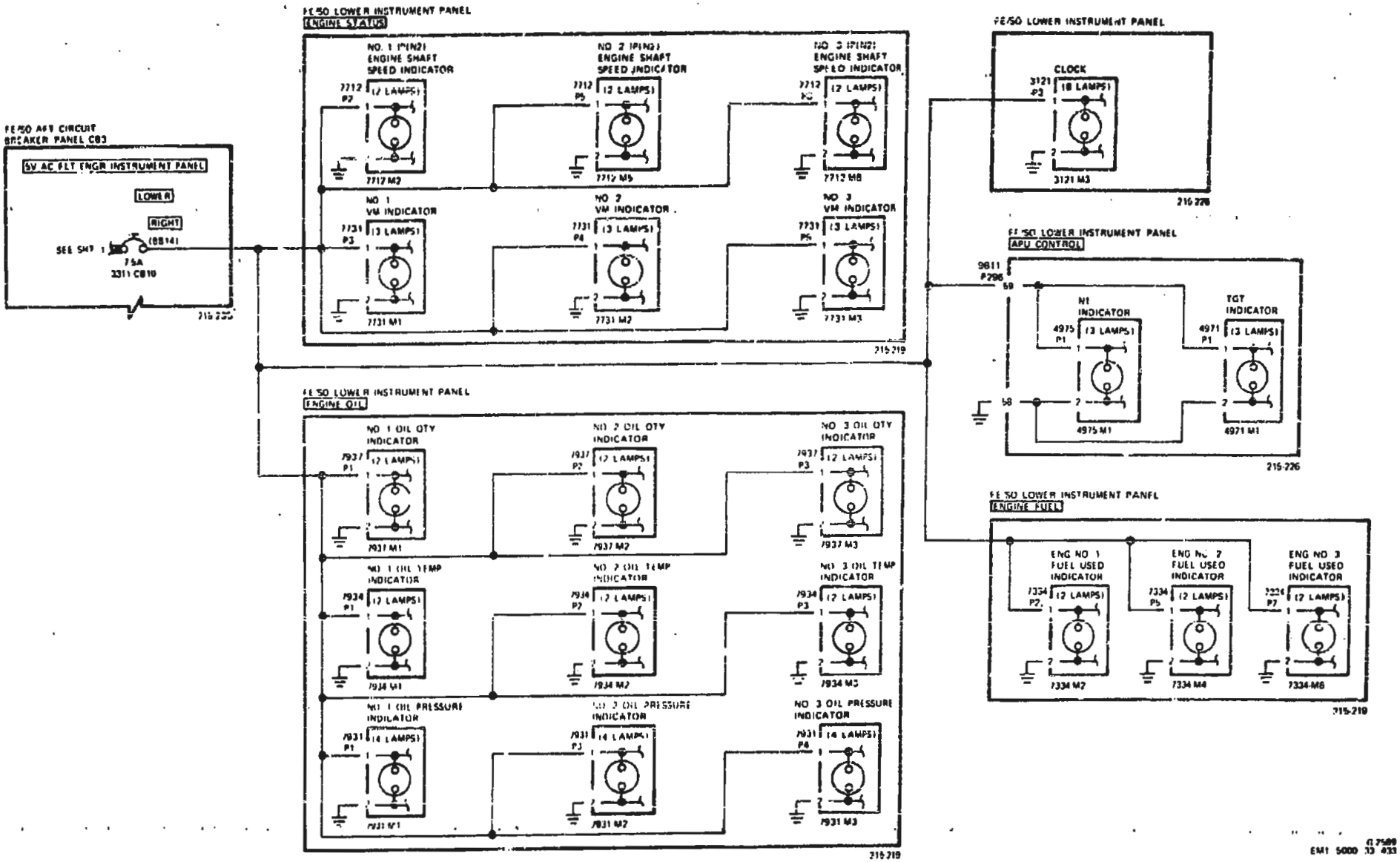
EFFECTIVITY: ALL



R Flight Engineer/Second Officers Integral Instrument
R Lighting Schematic
R SCHEM 4 (Sheet 3)

R EFFECTIVITY: ALL

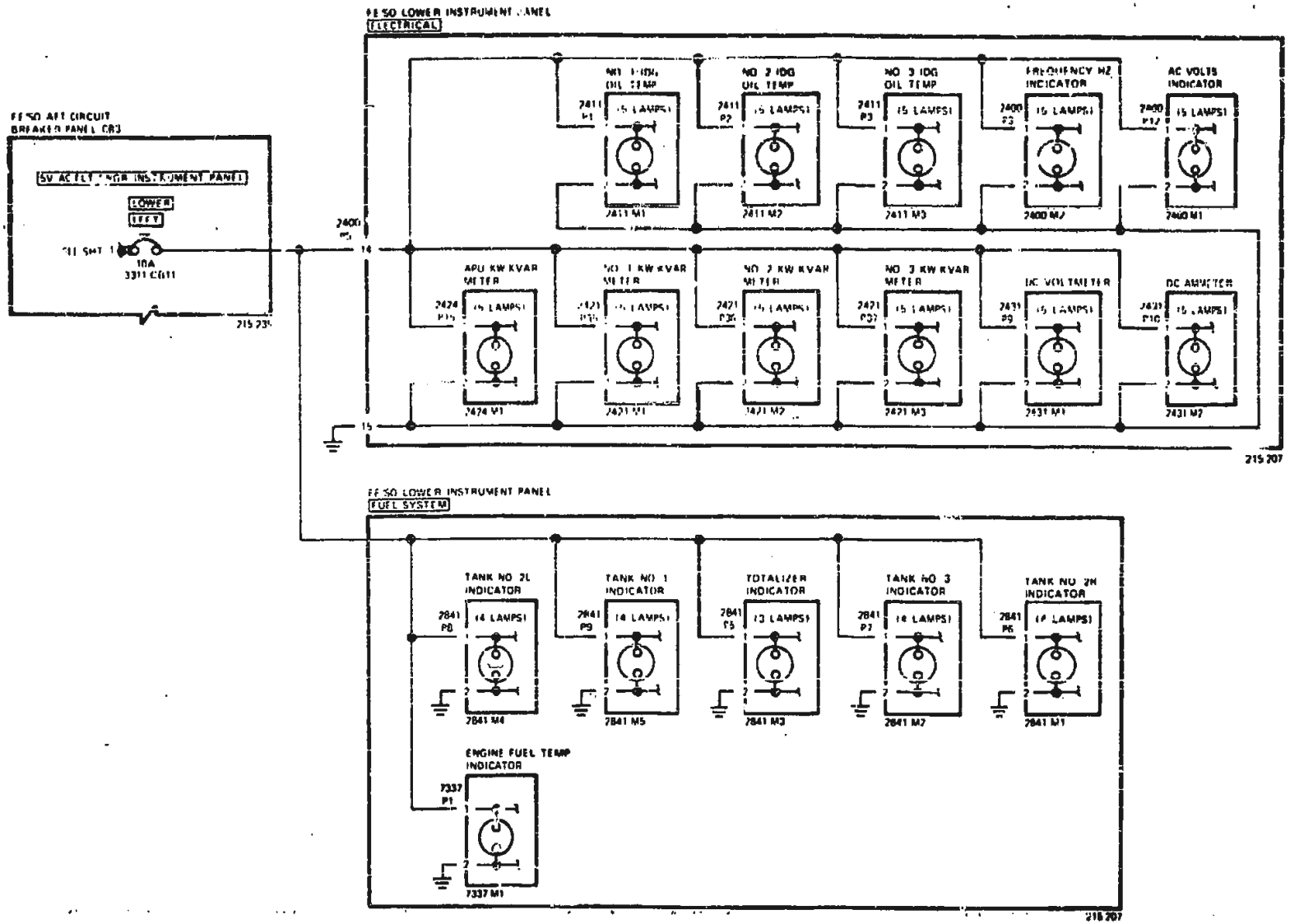
0018



Flight Engineer/Second Officers Integral Instrument Lighting Schematic SCHEM 4 (Sheet 4)

EFFECTIVITY: ALL

0018



R Flight Engineer/Second Officers Integral Instrument
R Lighting Schematic
R SCHEM 4 (Sheet 5)

R EFFECTIVITY: ALL
R
001B

INTEGRAL INSTRUMENT LIGHT DIMMER - REMOVAL AND INSTALLATION

1. Referenced Procedure

24-00-00 Electrical Power - Maintenance Practices

2. Removal/Installation

A. Removal

R (1) On Flight Engineer/Second Officers (FE/SO) overhead
R circuit breaker panel CB2, zone 215 and FE/SO aft
R circuit breaker panel CB3, zone 215, open and tag circuit breaker as follows:

DIMMER	CIRCUIT BREAKER
R Captains instruments	CAPT INSTR LT (J12) CB3
Engine instruments	CTR INSTR & GLARESHLD LT (J13) CB3
R First Officers instruments	F/O INSTR (E5) CB2
R Flight Engineer/Second Officers instruments	F/E INSTR (E9) CB2

(2) Gain access to dimmer (Ref. Fig. 401).

(3) Disconnect electrical connector.

(4) Disconnect and tag wires from G and LV terminals.

(5) Remove mounting screws and dimmer.

B. Installation

(1) Verify that circuit breaker opened in Step 2A(1) is open and tagged.

(2) Set dimmer in place and install mounting screws.

(3) Install electrical connector.

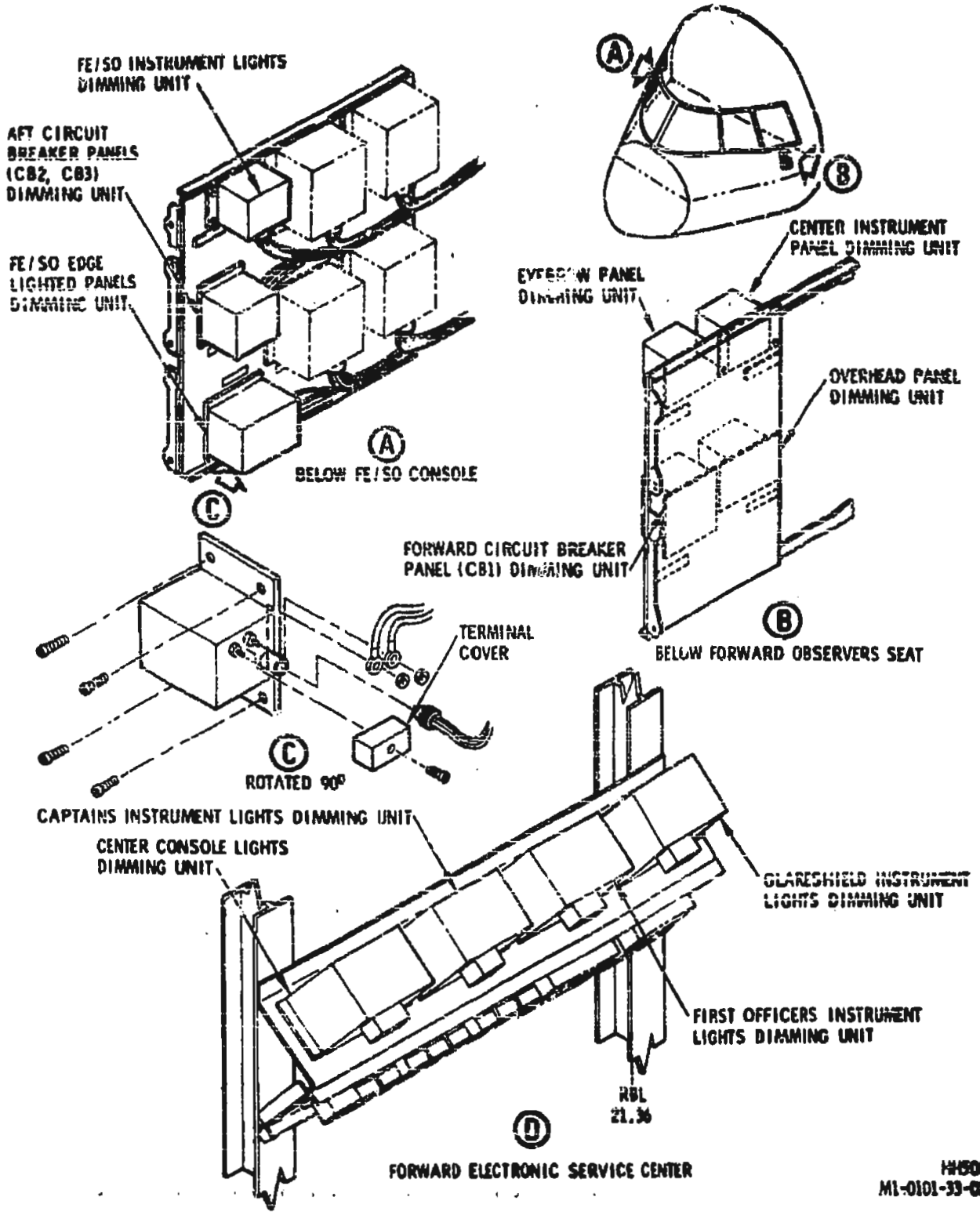
(4) Connect wires to G and LV terminals and remove tags.

(5) Remove tag and close circuit breaker opened in Step 2A(1).

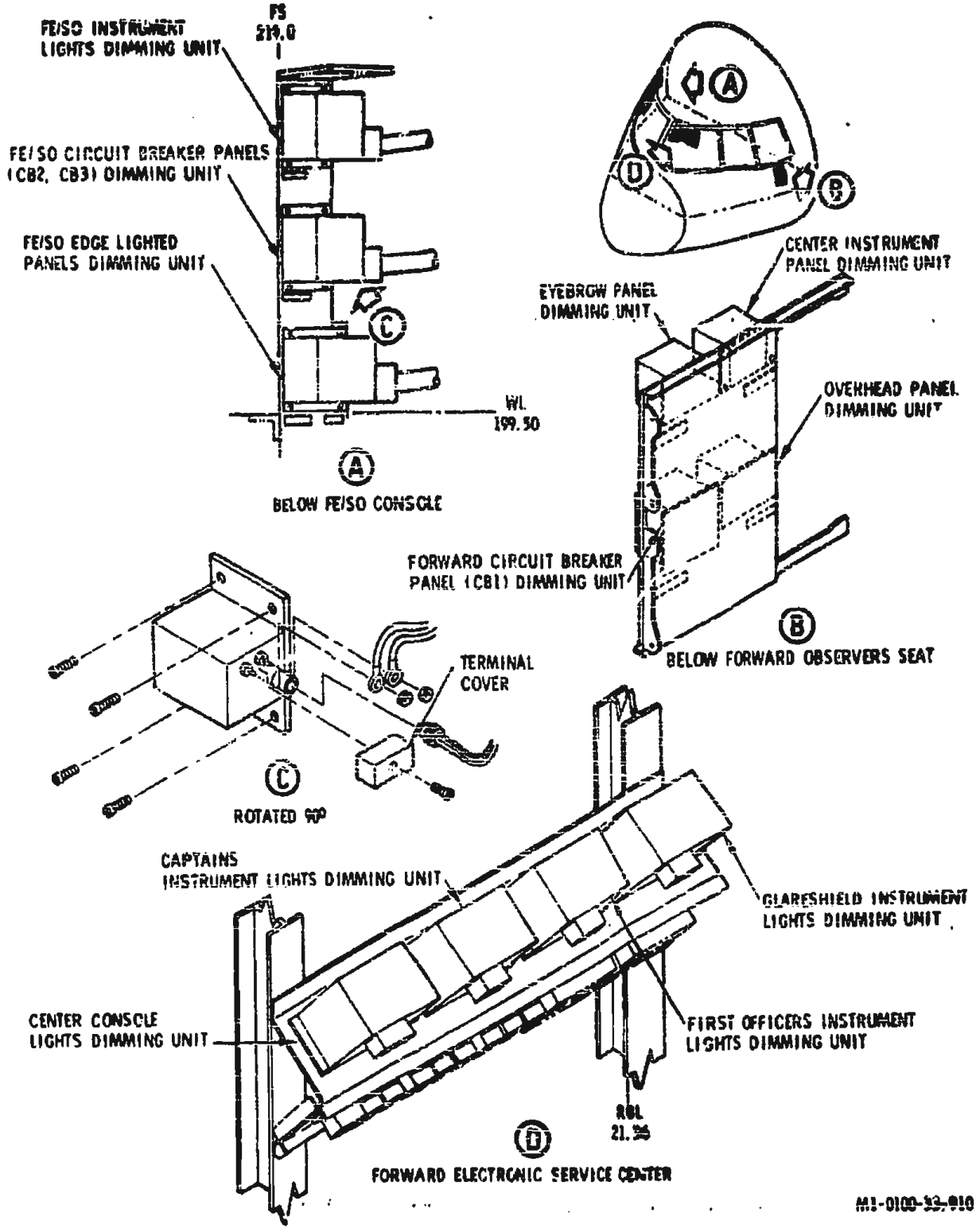
(6) Turn on electrical power (Ref. 24-00-00).

(7) Operate light control rheostat to test dimmer.

(8) Turn off electrical power (Ref. 24-00-00).



Dimmer - Removal and Installation
Figure 401



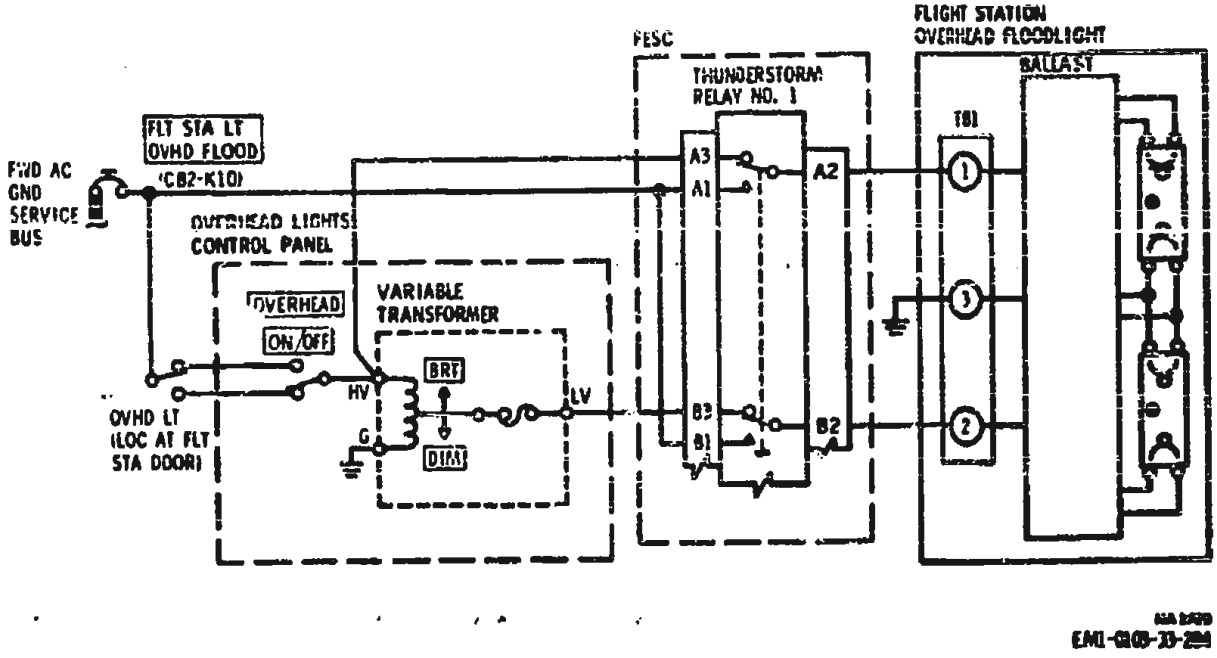
Dimmer - Removal and Installation
Figure 401

OVERHEAD FLOOD FLIGHTING - DESCRIPTION AND OPERATION

1. General

A single overhead fluorescent floodlight provides general illumination for the flight station . A pushbutton switch at the flight station door and an identical ON/OFF OVERHEAD pushbutton switch on the pilots LIGHTS panel are used to control the overhead floodlight from either location (Ref. Fig. 1). A dimming control is incorporated on the LIGHTS panel.

Phase B power from the 115V ac forward ground service bus is applied through the OVHD FLOOD circuit breaker on the Flight Engineer/Second Officers overhead circuit breaker panel CB2, zone 215, to the common side of the pushbutton switch at the flight station door. This switch has a SPDT configuration; each time this switch is actuated it remains in its new state. The common side of the ON/OFF OVERHEAD pushbutton switch (same configuration) is connected to a variable autotransformer, which regulates light intensity from DIM to BRT (bright), through the normally deenergized contacts of thunderstorm relay No. 1 to the overhead floodlight assembly. The two switches have their noncommon sides connected in parallel, so that the overhead floodlgiht can be turned on or off from either location. If the



Flight Station Overhead Floodlight Schematic Diagram
Figure 1

thunderstorm circuit is activated, thunderstorm relay No. 1 energizes and provides a path from the circuit breaker to the floodlight, bypassing the switches and autotransformer. The floodlight illuminates to full intensity.

OVERHEAD FLOODLIGHT - REMOVAL AND INSTALLATION

1. Referenced Procedure

R 24-00-00 Electrical Power - Maintenance Practices

2. Removal/Installation

A. Removal

(1) On Flight Engineer/Second Officers overhead circuit breaker panel CB2, zone 215, open and tag circuit breaker GROUND SERVICE BUS - OVHD FLOOD.

(2) Release six (6) quarter turn fasteners on light cover and remove cover (Ref. Fig. 401).

(3) Remove fluorescent lamps.

(4) Remove mounting bolts and lower fixture to gain access to terminal block.

(5) Disconnect and tag wires.

(6) Remove light fixture.

B. Installation

(1) Verify that circuit breaker opened in Step 2A(1) is open and tagged.

(2) Position light fixture, remove tags from wires and connect wires to terminal block (Ref. Fig. 401).

(3) Set fixture into mounting position and secure with mounting bolts.

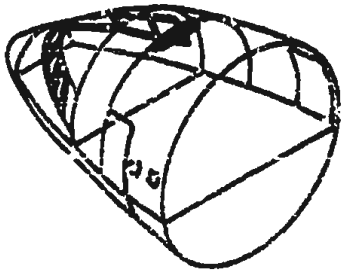
(4) Install fluorescent lamps.

(5) Remove tag and close circuit breaker opened in Step 2A(1).

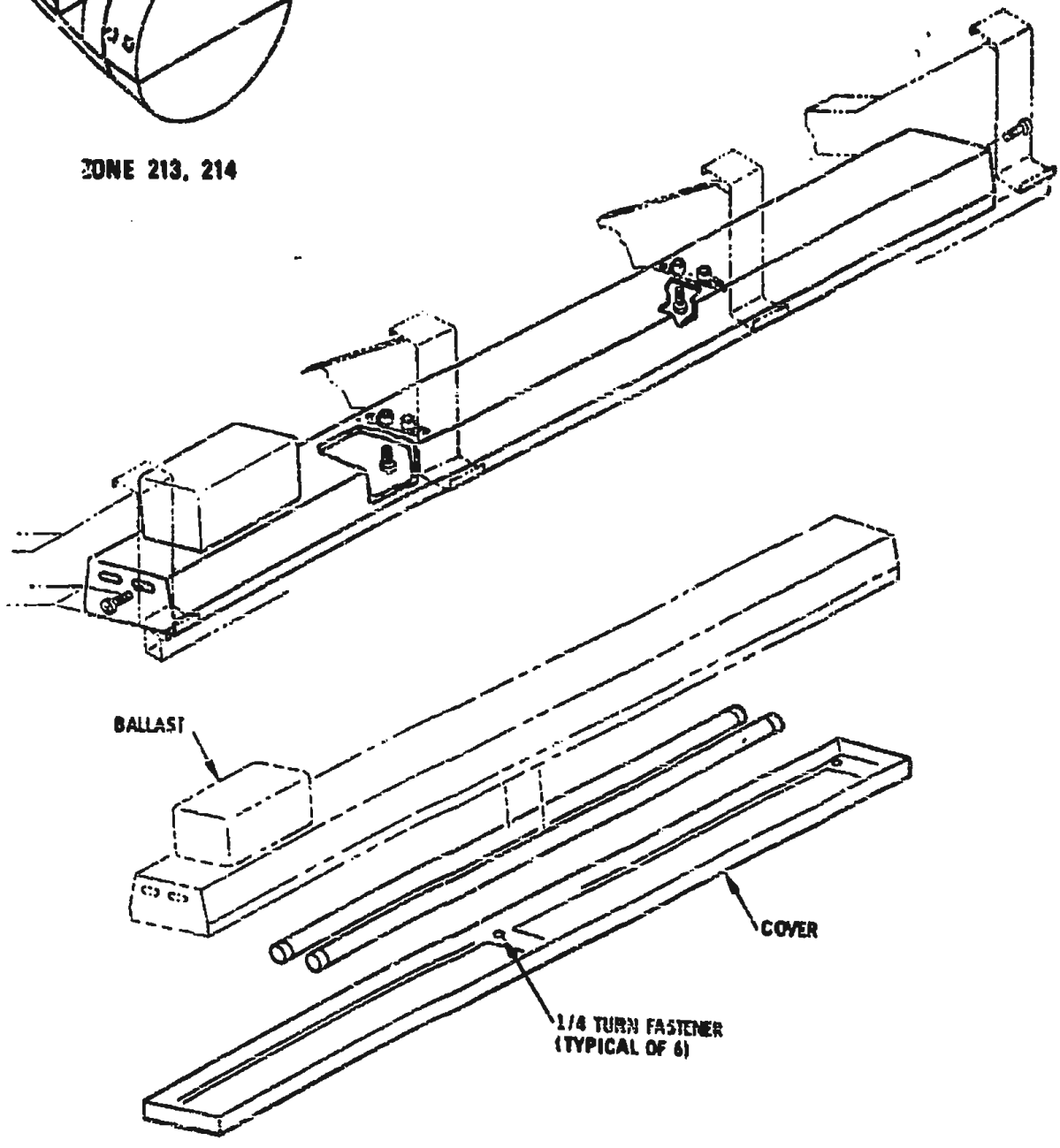
(6) Install light cover.

3. Relamping

A. Overhead Floodlight



ZONE 213, 214



M1-0001-33-026

R Overhead Floodlight - Removal and Installation
R Figure 401

(1) On overhead LIGHTS panel, zone 210, set OVERHEAD control to OFF.

(2) Remove light cover (Ref. Fig. 401).

(3) Remove faulty lamp.

(4) Install replacement lamp.

R (5) Turn on electrical power (Ref. 24-00-00).

(6) Turn on overhead floodlight to test lamps. Turn light off after test.

R (7) Turn off electrical power (Ref. 24-00-00).

(8) Install light cover.

INSTRUMENT PANEL FLOODLIGHTING - DESCRIPTION AND OPERATION

1. General

Floodlights are provided for the pilots instrument panels, center and side consoles, and the Flight Engineer/Second Officers panels. The pilots instrument panel floodlights and the Flight Engineer/Second Officers floodlight are dual-purpose lights; separate lamps are incorporated for normal and standby lighting.

2. Standby Floodlight Operation

The standby floodlight lamps operate on battery power through the dc standby bus and the standby floodlight relay (Ref. Fig. 1). In normal operation, the relay is energized and the standby floodlight lamp circuit is open.

Loss of dc essential bus power causes the dc standby bus to be powered by the aircraft battery (Ref. 24-32-00) and deenergizes the standby floodlight relay. The dc standby bus now supplies battery power to the standby floodlights.

The INSTR STBY LIGHTS switch on the pilots overhead panel controls floodlight brightness. In the DIM position, a resistor in the circuit reduces lighting intensity; in the BRIGHT position of the switch, the resistor is bypassed.

3. Flight Engineer/Second Officers Floodlight

A. Description

R
R The Flight Engineer/Second Officers station is illuminated by a dual-purpose floodlight located above the upper panel. The floodlight fixture contains both fluorescent and incandescent lamps. The fluorescent lamps provide normal service lighting; the incandescent lamps provide standby lighting in case of power failure. The incandescent lamps are powered by the battery and dc standby bus.

B. Operation

When the FLOOD control on the LIGHTS panel (located at the lower left edge of the Flight Engineer/Second Officers desk) is turned away from the OFF position, the fluorescent floodlight is energized. The ac essential bus (Ref. Fig. 2) supplies 115V ac, 400 Hz, Phase C power across the F/E FLOOD LT circuit breaker on panel CB3, zone 215, to the FLOOD

control on the LIGHTS panel. The FLOOD control consists of a switch and a variable transformer which regulates the voltage across the fluorescent lamps. Thunderstorm relay No. 3 (located in the forward electronics service center, zone 112) is connected in series between the FLOOD control and the floodlight assembly, with the normally deenergized contacts used to complete the circuit. Energizing the thunderstorm relay (Ref. 33-10-00) applies power from the circuit breaker directly to the fluorescent lamps; the switch and variable transformer are bypassed.

4. Center Console Floodlight

A. Description

Floodlight illumination of the center console is provided by the CENTER CONSOLE FLOOD panel mounted on the pilots overhead panel, zone 210. This panel combines an OFF-BRT intensity control and an incandescent lamp assembly.

B. Operation

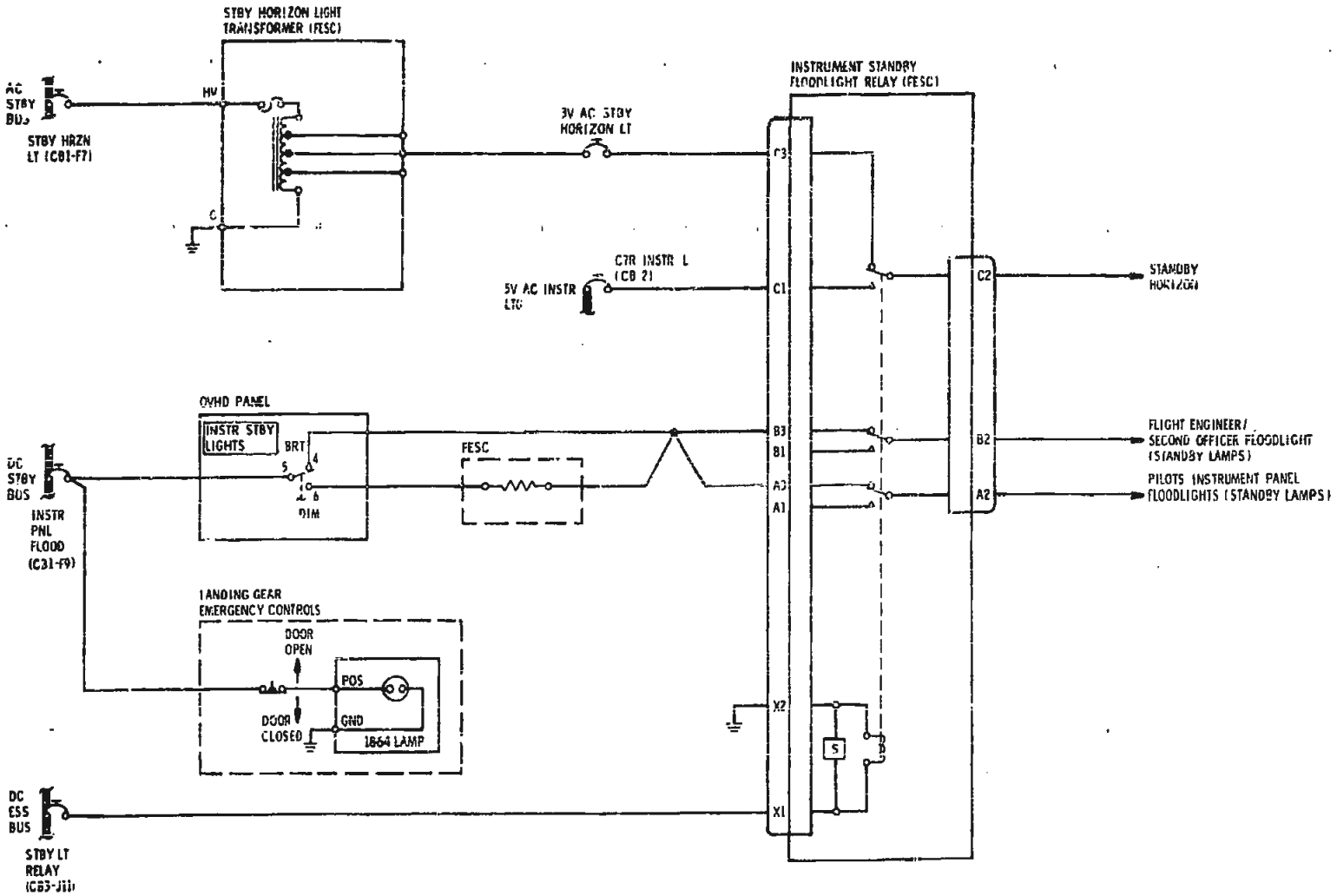
The dc essential bus (Ref. Fig. 3) provides 28V dc, through the CTR CONSOLE FLOOD circuit breaker on panel CB3, zone 215, to a switch in the center console floodlight assembly. Turning the control away from the OFF position closes the switch and applies +28V dc to one side of a potentiometer and to the collector of a NPN transistor. Varying the control varies the bias to the base of the transistor, which causes the current flow from the emitter (emitter-follower configuration) to the lamp to be varied.

Thunderstorm relay No. 9 located in the forward electronics service center, zone 112, is out of the circuit while in the deenergized state. When the thunderstorm circuit is energized, 28V dc is applied directly from the circuit breaker to the lamp filament. An isolation diode is installed to protect the transistor when the thunderstorm circuit is in use.

5. Pilots Instrument Panel Floodlight

A. Description

The Captains, First Officers and center instrument panels are illuminated by dual-purpose floodlights mounted below the glareshield. The floodlight fixtures contain both fluorescent and incandescent lamps. Normal service lighting is provided by fluorescent lamps or, in the very low intensity mode, by a number of incandescent lamps. The



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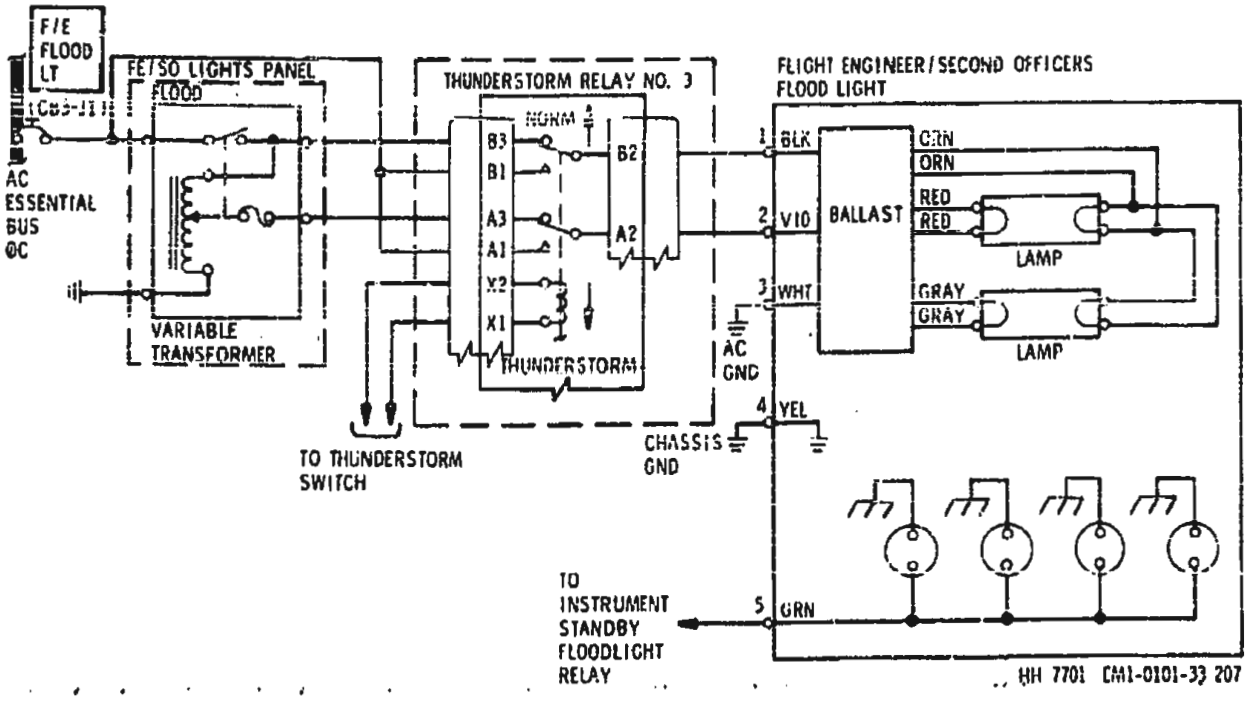
Standby Floodlights Schematic
Figure 1

R R R remaining incandescent lamps provide standby lighting in case of power failure and are powered by the battery and dc standby bus.

B. Operation

If either pilot turns his FLOOD control (located on the glareshield side panel) away from the OFF position, his fluorescent floodlight comes on Ref. Fig. 4). The ac essential bus supplies 115V ac, 400 Hz, Phase A power through the CAPT & F/O FLOOD circuit breaker on panel CB3, zone 215, to a switch that is part of the Captains FLOOD control, and to a switch that is part of the First Officers FLOOD control. A variable transformer, incorporated as a part of each FLOOD control, provides voltage adjustment of the electrical energy flowing from the switch, through the normally deenergized contacts of thunderstorm relay No. 5 (located in the forward electronics service center, zone 112) to the ballast and fluorescent lamps. Energizing the thunderstorm circuit applies power directly from the circuit breakers to the fluorescent lamps; the switch and associated dimming transformer are bypassed.



R R Flight Engineer/Second Officers Floodlight Schematic
Figure 2

6. Pilots Side Console Floodlights

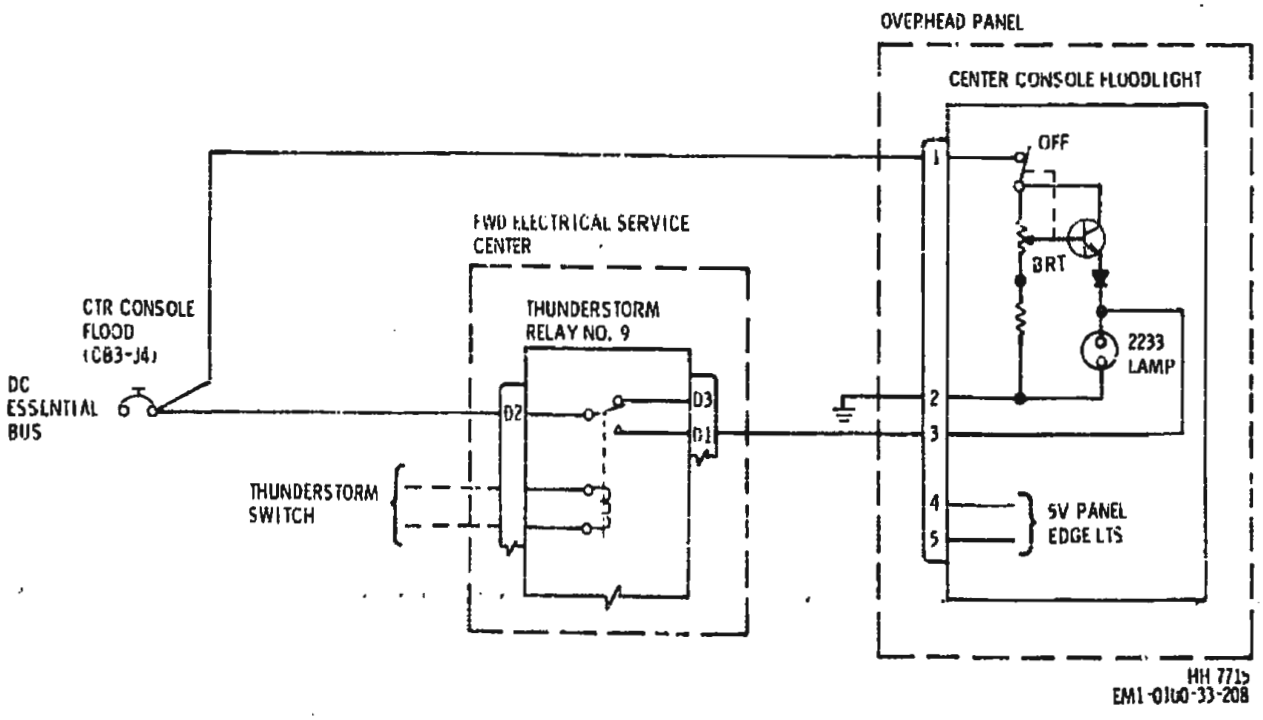
A. Description and Operation

A floodlight (Ref. Fig. 5) is mounted under the Captains and First Officers side glareshield. The light assembly incorporates an intensity control with an off position. Power from the 28V dc bus No. 3 is supplied through the SIDE CONSOLE FLOOD circuit breaker on panel CB2, zone 215, to the Captains and First Officers side console floodlight.

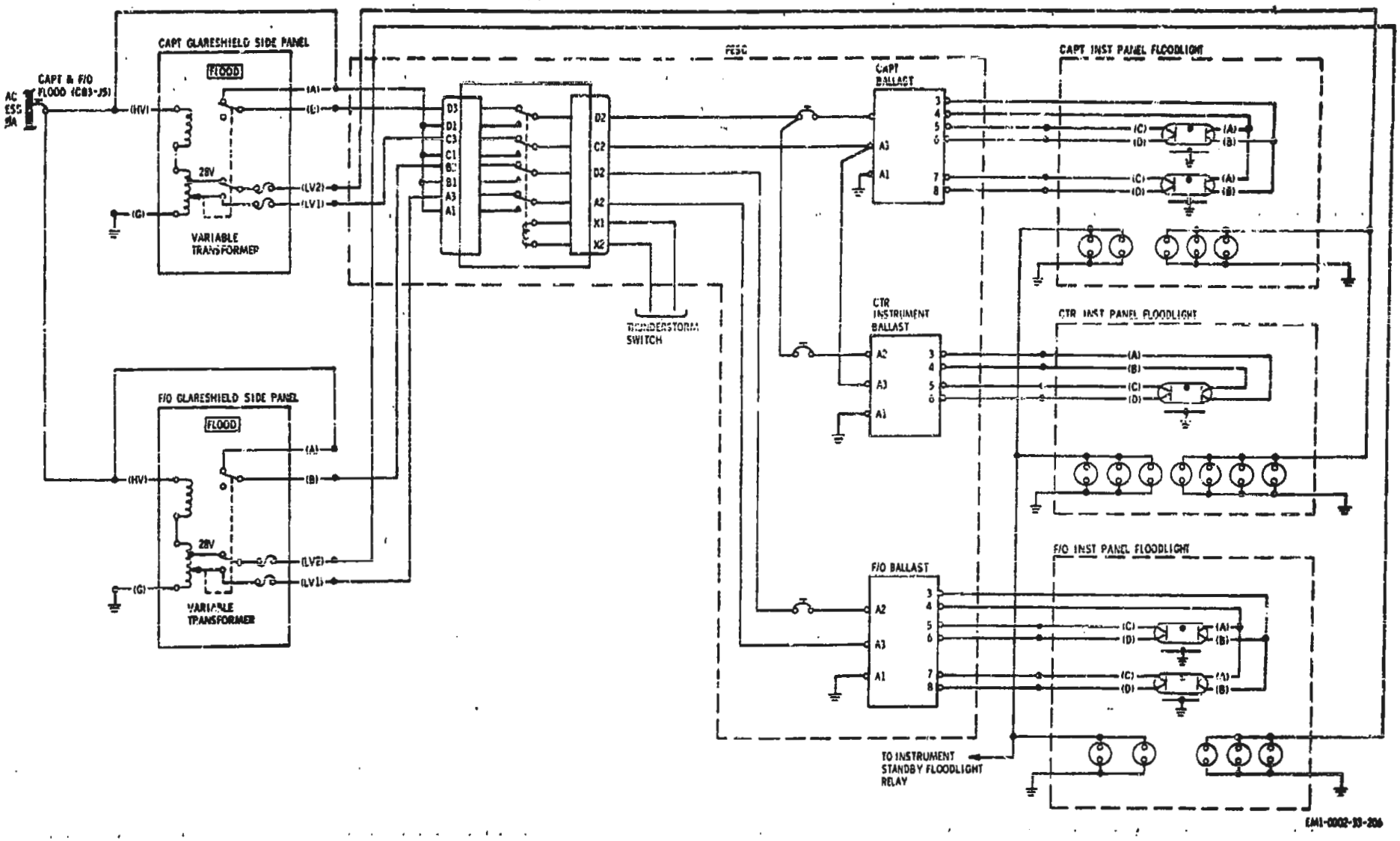
7. Landing Gear Emergency Control Panel Light

A. Description and Operation

A light is incorporated at the lower aft side of the pilots center console to illuminate the landing gear emergency control panel. The light switch is operated by the panel cover; when the cover is raised, the light comes on. Power to the light is supplied by the standby dc bus (Ref. Fig. 1).



Center Console Floodlight Schematic
Figure 3



R Pilots Instrument Panel Floodlights Schematic
R Figure 4

EFFECTIVITY: ALL

001B

8. On aircraft 032-999,
Captains and First Officers Chart Light

A. Description and Operation

The captains chart light is located in the forward upper left side of the flight station.

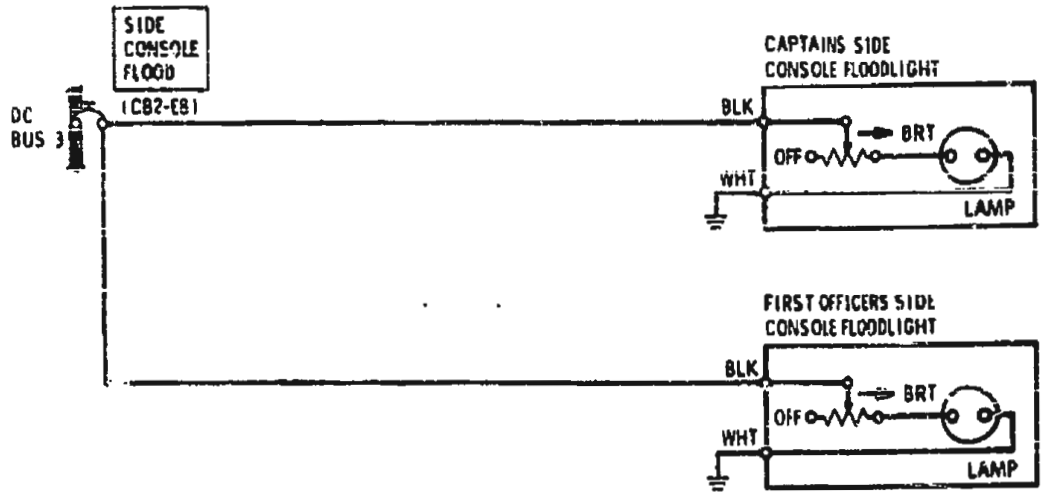
The First Officers chart light is located in the forward upper right side of the flight station. The light assembly incorporates an intensity control with an off position.

R Power from the 28 VDC bus No. 3 is supplied through the SIDE
R CONSOLE FLOOD circuit breaker on panel CB-2, zone 211 to the Captains and First Officers chart lights (Ref. Figure 6).

9. On aircraft 032-999,
Captains and First Officers Flight Kit Light

A. Description and Operation

A flight kit light (Ref. Fig. 7) is mounted on the lower Captains and First Officers side console. On/off control of the flight kit lights is provided by a toggle switch located on the adjacent headset stowage and mic select panel.



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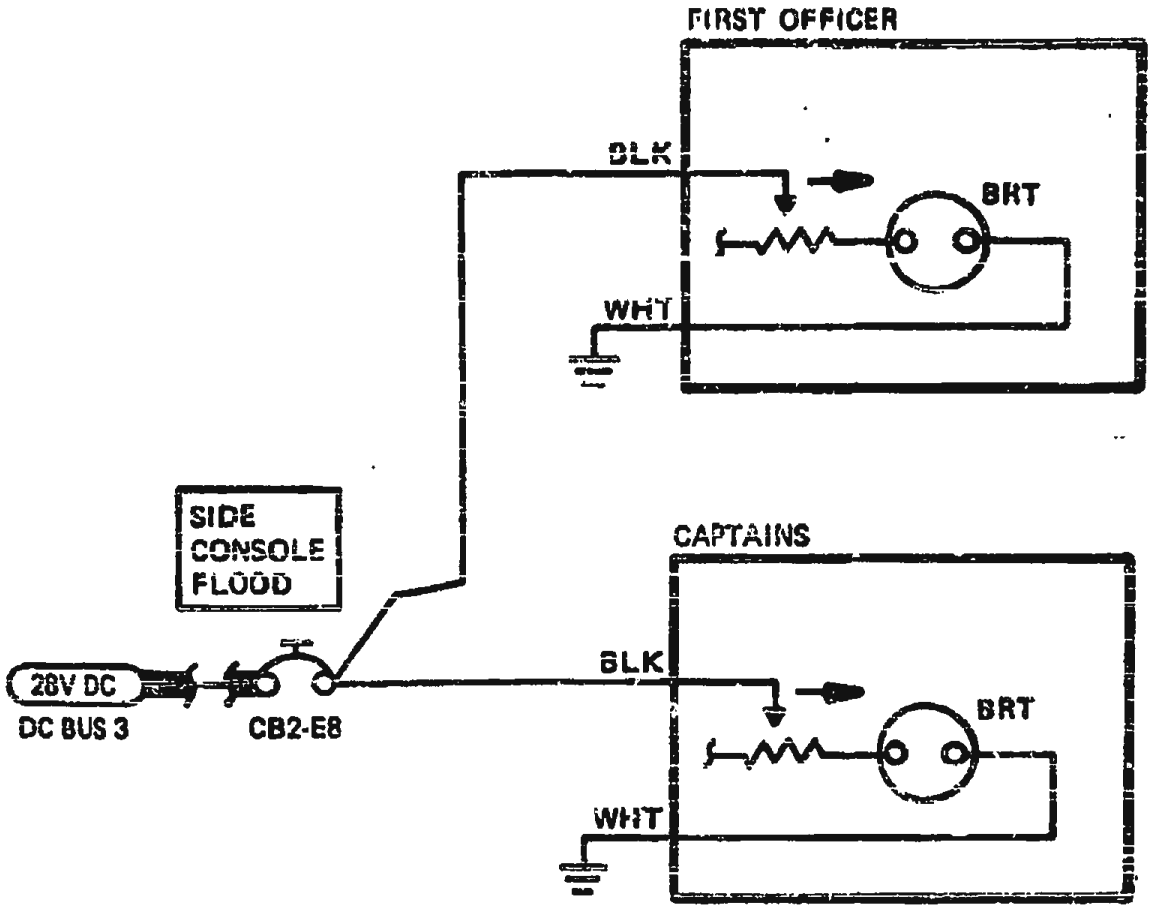
Pilots Side Console Floodlights Schematic
Figure 5



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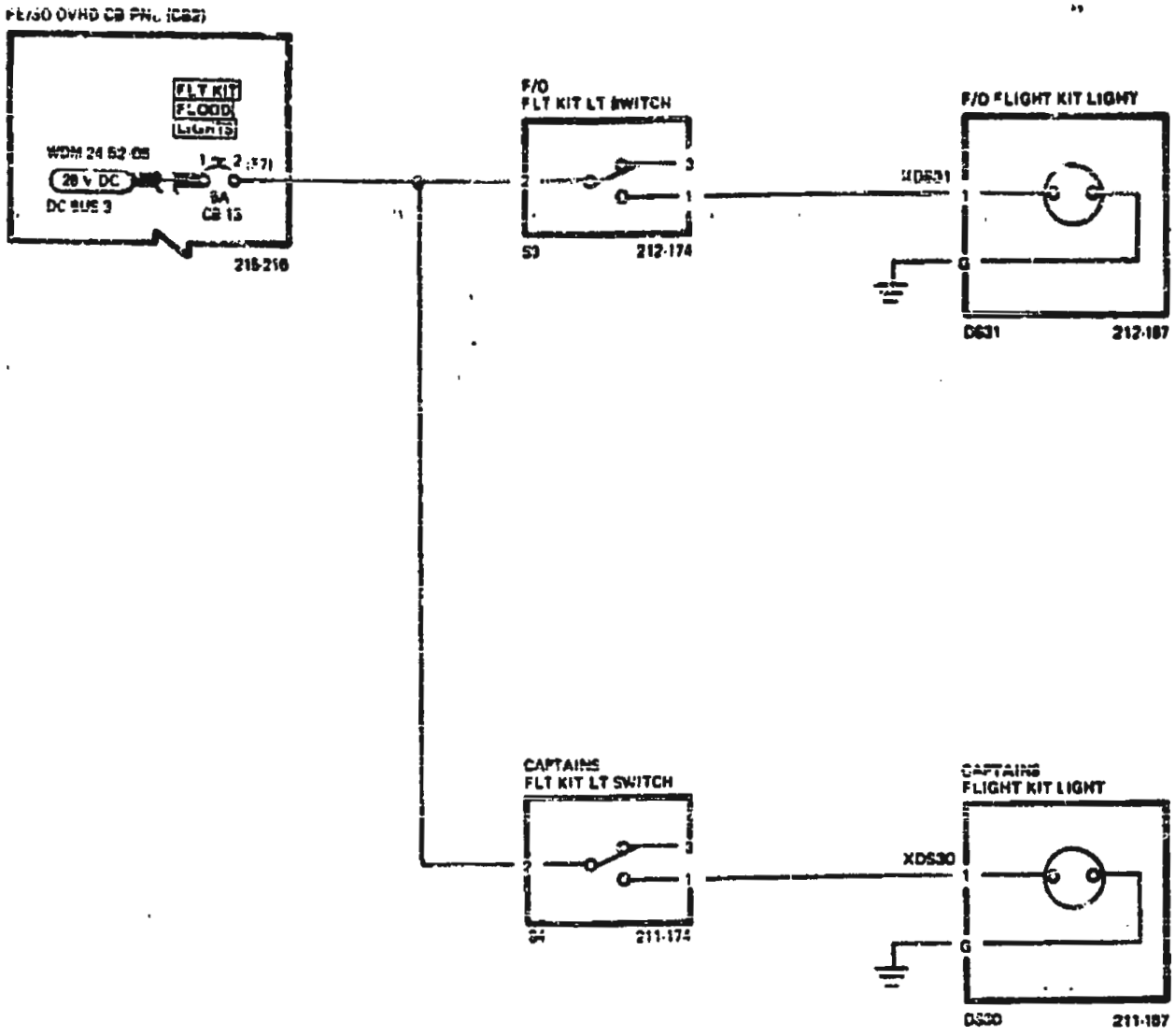
Captains and First Officers Chart Light Schematic
Figure 6



NOTE

ALL REFERENCE DESIGNATORS ARE PREFIXED WITH 3313 UNLESS OTHERWISE SPECIFIED

EM1-8000-33-709

Flight Kit Lights Schematic
Figure 7

FLIGHT ENGINEER/SECOND OFFICERS FLOODLIGHT REMOVAL AND INSTALLATION

1. Referenced Procedure

R 24-00-00 Electrical Power - Maintenance Practices

2. Removal/Installation

A. Removal

(1) On Flight Engineer/Second Officers aft circuit breaker panel CB3, zone 215, open and tag circuit breaker INTERIOR LIGHTS - F/E FLOOD LT.

(2) Release six (6) quarter turn fasteners and remove cover.

(3) Remove fluorescent and standby lamps.

(4) Remove mounting bolts and lower fixture to gain access to terminal block.

(5) Disconnect and tag wires.

(6) Remove light fixture.

B. Installation

(1) Verify that circuit breaker opened in Step 2A(1) is open and tagged.

(2) Position light fixture, remove tags from wires and connect wires to terminal block (Ref. Fig. 401).

(3) Set fixture into mounting position and secure with mounting bolts.

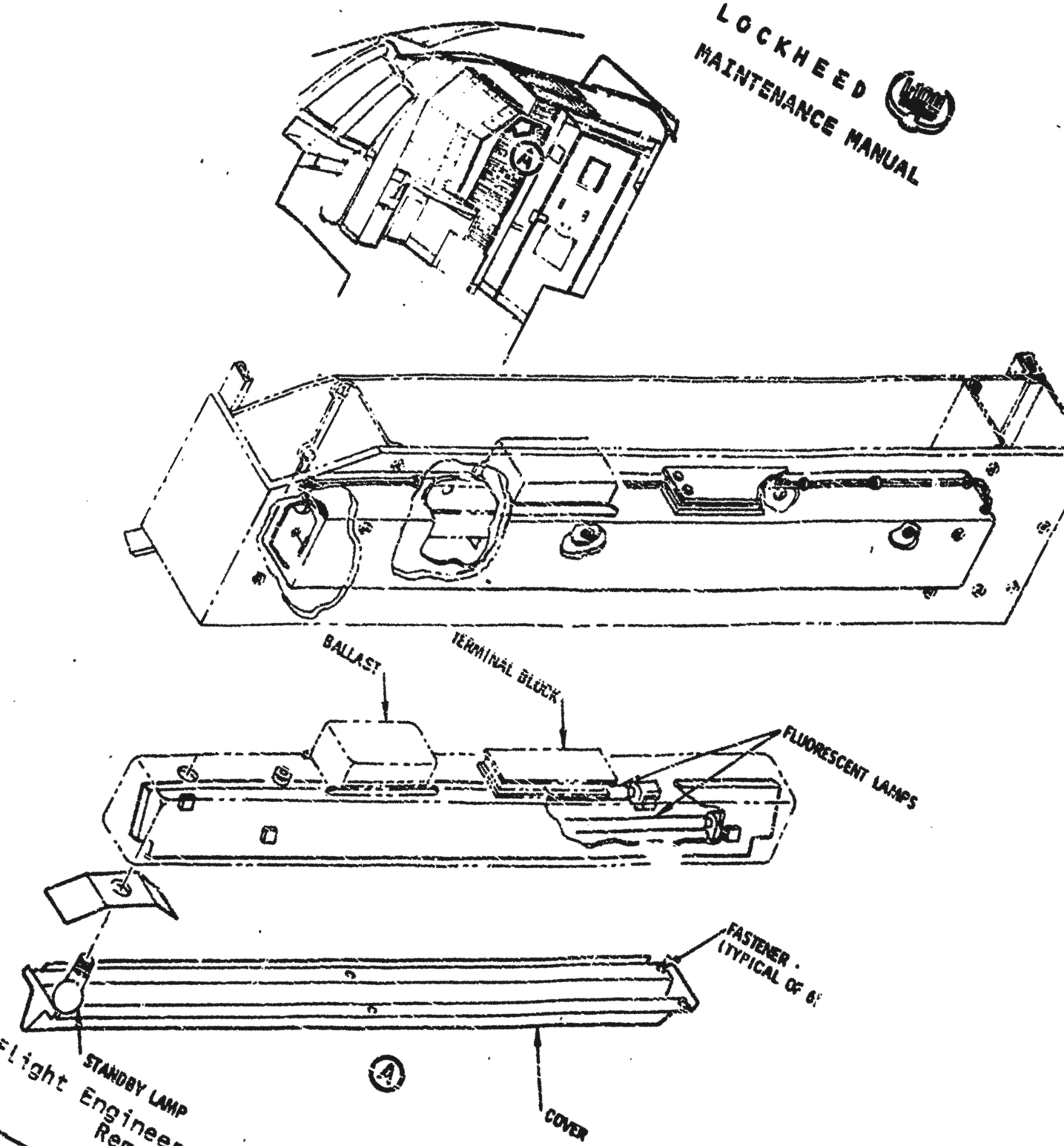
(4) Install lamps.

(5) Install light cover.

(6) Remove tag and close circuit breaker opened in Step 2A(1).

3. Relamping

A. Flight Engineer/Second Officers Floodlight



Flight Engineer/Second Officers Floodlight
Removal and Installation
Figure 401

ITY: ALL

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(1) On Flight Engineer/Second Officers LIGHTS panel, zone 215, place FLOOD control in OFF position.

(2) Remove light cover (Ref. Fig. 401).

(3) Remove faulty lamp.

(4) Install replacement lamp.

R (5) Turn on electrical power (Ref. 24-00-00).

(6) To test fluorescent lamps turn on Flight Engineer/Second Officers floodlight. Turn light off after test.

R (7) To test incandescent lamps, open circuit breaker STBY LT RELAY (J11) on Flight Engineer/Second Officers aft circuit breaker panel CB3, zone 215. Close circuit breaker after test.

R (8) Turn off electrical power (Ref. 24-00-00).

(9) Install light cover.

CENTER CONSOLE FLOODLIGHT - REMOVAL AND INSTALLATION

1. Referenced Procedure

R 24-00-00 Electrical Power - Maintenance Practices

2. Removal/Installation

A. Removal

(1) On Flight Engineer/Second Officers aft circuit breaker panel CB3, zone 215, open and tag circuit breaker INTERIOR LIGHTS - CTR CONSOLE FLOOD.

(2) Release quarter-turn fasteners which secure flood light to pilots overhead panel, zone 210 (Ref. Fig. 401).

(3) Pull floodlight from overhead panel to expose electrical connector.

(4) Disconnect electrical connector.

B. Installation

(1) Verify that circuit breaker opened in Step 2A(1) is open and tagged.

(2) Connect electrical connector to floodlight.

(3) Position floodlight in overhead panel and secure with quarter-turn fasteners.

(4) Remove tag and close circuit breaker opened in Step 2A(1).

3. Relamping

A. Center Console Floodlight

(1) Set CENTER CONSOLE FLOOD control to OFF.

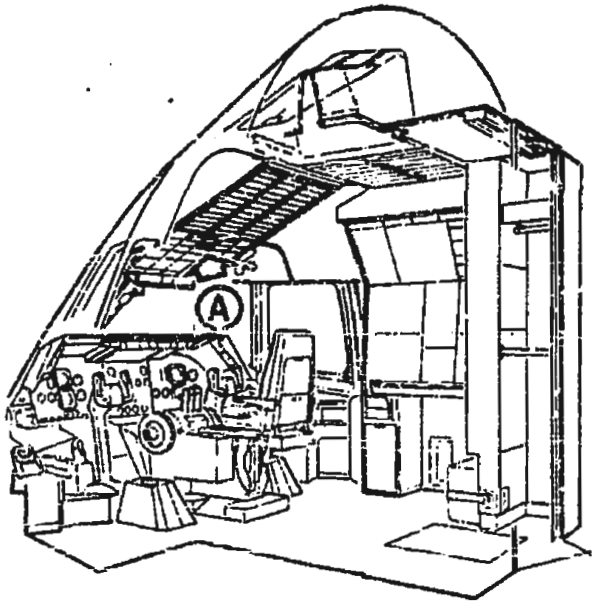
(2) Remove faulty lamp.

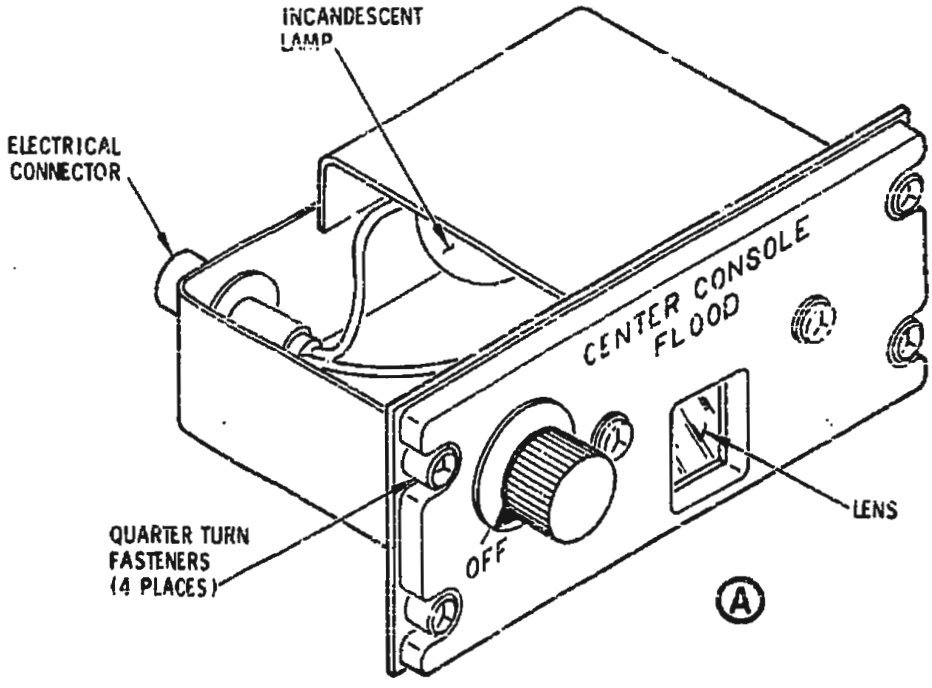
(3) Install replacement lamp.

R (4) Turn on electrical power (Ref. 24-00-00).

(5) Turn on center console floodlight to test lamp. Turn light off after test.

R (6) Turn off electrical power (Ref. 24-00-00).





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R Center Console Floodlight - Removal and Installation
R Figure 401

R EFFECTIVITY: ALL
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PILOTS INSTRUMENT PANEL FLOODLIGHT - REMOVAL AND INSTALLATION

1. Referenced Procedure

R 24-00-00 Electrical Power - Maintenance Practices

2. Removal/Installation

A. Removal

(1) On Flight Engineer/Second Officers aft circuit breaker panel CB3, zone 215, open and tag circuit breaker INTERIOR LIGHTS - CAPT & F/O FLOOD.

(2) Release light cover (Ref. Fig. 401).

(3) Remove fluorescent lamps.

(4) Disconnect electrical connector.

(5) Remove mounting bolts and remove floodlight.

B. Installation

(1) Verify that circuit breaker opened in Step 2A(1) is open and tagged.

(2) Position floodlight on glareshield and install mounting bolts (Ref. Fig. 401).

(3) Connect electrical connector.

(4) Install lamps.

(5) Install light cover.

(6) Remove tag and close circuit breaker opened in Step 2A(1).

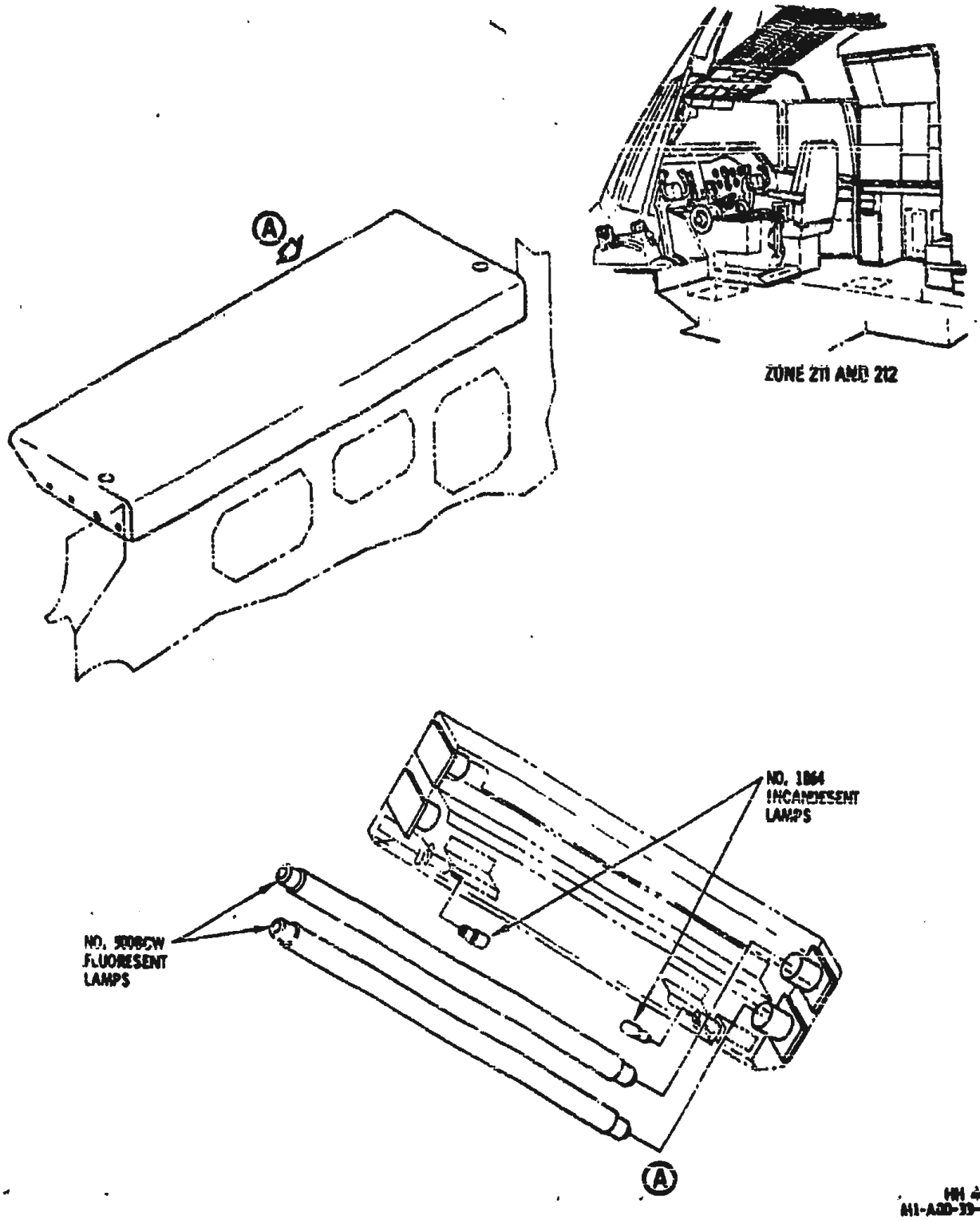
3. Relamping

A. Pilots Instrument Panel Floodlight

(1) On glareshield panel, set FLOOD control to OFF.

(2) Release floodlight cover (Ref. Fig. 401).

(3) Remove faulty lamp.



Pilots Instrument Panel Floodlight - Removal and Installation
Figure 401

(4) Install replacement lamp.

R (5) Turn on electrical power (Ref. 24-00-00).

(6) To test normal lights (fluorescent lamps and 2 incandescent lamps), turn on floodlight. Turn light off after test.

R (7) To test standby incandescent lamps, open circuit breaker STBY LT RELAY (J11) on Flight Engineer/Second Officers aft circuit breaker panel CB3, zone 215. Close circuit breaker after test.

R (8) Turn off electrical power (Ref. 24-00-00).

(9) Install light cover.

CENTER INSTRUMENT PANEL FLOODLIGHT - REMOVAL AND INSTALLATION

1. Referenced Procedure

R 24-00-00 Electrical Power - Maintenance Practices

2. Removal/Installation

A. Removal

(1) On Flight Engineer/Second Officers aft circuit breaker panel CB3, zone 215, open and tag circuit breaker INTERIOR LIGHTS - CAPT & F/O FLOOD.

(2) Release light cover (Ref. Fig. 401).

(3) Remove fluorescent lamps.

(4) Disconnect electrical connector.

(5) Remove mounting bolts and remove floodlight.

B. Installation

(1) Verify that circuit breaker opened in Step 2A(1) is open and tagged.

(2) Position floodlight on glareshield and install mounting bolts (Ref. Fig. 401).

(3) Connect electrical connector.

(4) Install lamps.

(5) Remove tag and close circuit breaker opened in Step 2A(1).

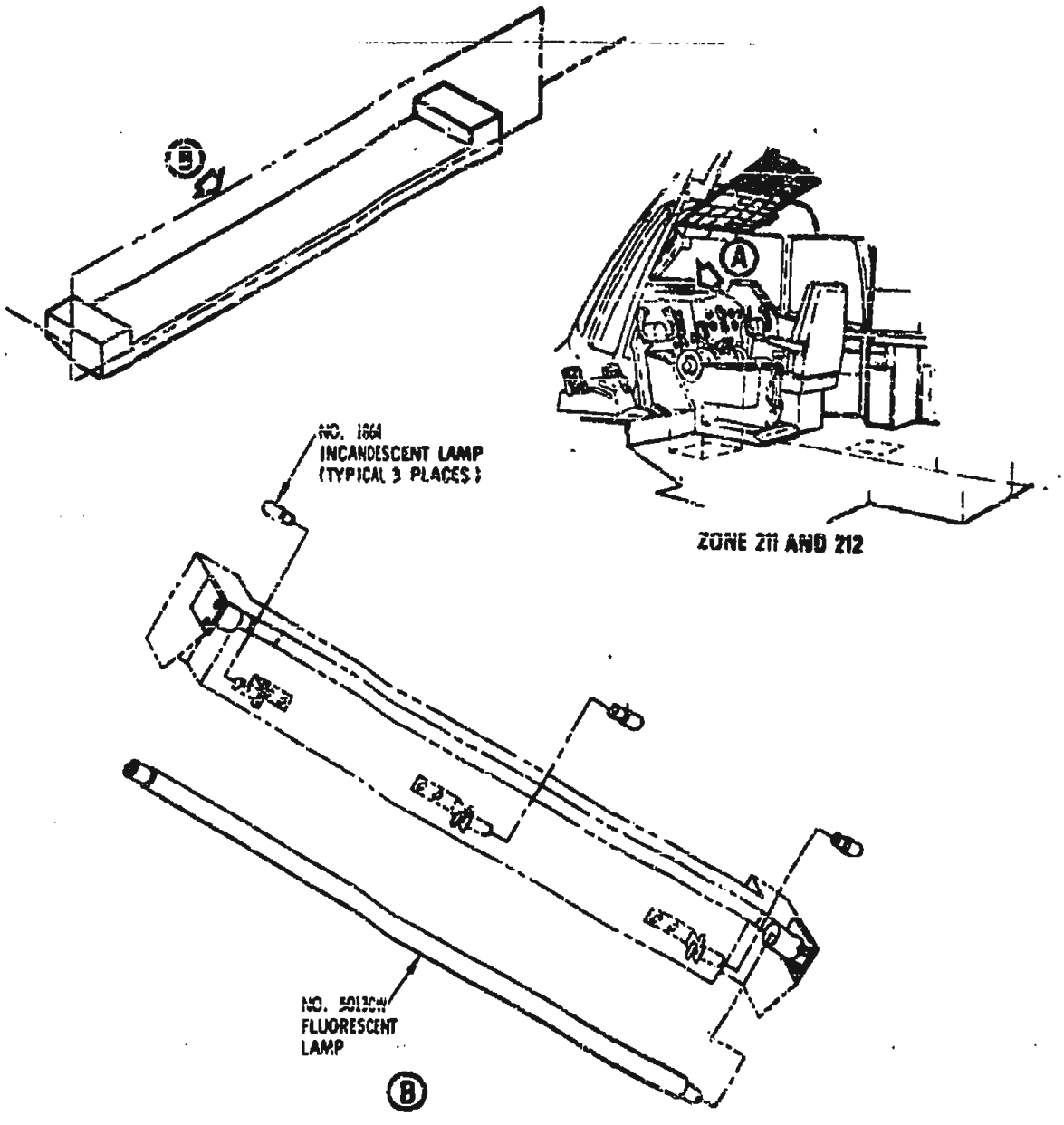
3. Relamping

A. Center Instrument Panel Floodlight

(1) On Captains glareshield panel, set FLOOD control to OFF.

(2) Release floodlight cover (Ref. Fig. 401).

(3) Remove faulty lamp.



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Center Instrument Panel Floodlight - Removal and Installation
Figure 401

(4) Install replacement lamp.

R (5) Turn on electrical power (Ref. 24-00-00).

(6) To test normal lights (fluorescent lamps and 4 incandescent lamps), turn on Captains instrument panel floodlight. Turn light off after test.

(7) To test standby incandescent lamps, open circuit
R breaker STBY LT RELAY (J11) on Flight Engineer/Second Officers aft circuit breaker panel CB3, zone 215. Close circuit breaker after test.

R (8) Turn off electrical power (Ref. 24-00-00).

(9) Install light cover.

CAPTAINS AND FIRST OFFICERS SIDE CONSOLE FLOODLIGHT REMOVAL AND INSTALLATION

1. Referenced Procedure

R 24-00-00 Electrical Power - Maintenance Practices

2. Removal/Installation

A. Removal

(1) On Flight Engineer/Second Officers overhead circuit breaker panel CB2, zone 215, open and tag circuit
R breaker FLIGHT STATION LIGHTS - SIDE CONSOLE FLOOD
R (E8).

(2) Remove floodlight mounting screws.

(3) Disconnect and tag wires.

B. Installation

(1) Verify that circuit breaker opened in Step 2A(1) is open and tagged.

(2) Remove tags and connect wires to light terminals.

(3) Set light into position and secure with mounting screws.

(4) Remove tag and close circuit breaker opened in Step 2A(1).

3. Relamping

A. Side Console Floodlight

(1) Turn control knob fully counterclockwise.

(2) Remove lens and hood.

(3) Remove faulty lamp.

(4) Install replacement lamp.

R (5) Turn on electrical power (Ref. 24-00-00).

(6) Turn on light to test lamp. Turn light off after test.

(7) Install lens and hood.

(8) Turn off electrical power (Ref. 24-00-00).

CAPTAINS AND FIRST OFFICERS CHART LIGHT - REMOVAL AND INSTALLATION

1. Referenced Procedure

   24-41-00 External Power/Ground Service System - Maintenance Practices

2. Removal/Installation

   A. Removal

      (1) On Flight Engineers/Second Officers overhead circuit breaker panel CB2, zone 215, open and tag circuit breaker SIDE CONSOLE FLOOD (E8).

      (2) Grasp light and pull to release mounting studs, then maneuver clear of panel (Ref. Fig. 401).

      (3) Slide boot off wire terminals, then disconnect and tag wires (Ref. Fig. 401, Sheet 1 or 2).

   B. Installation

      (1) Verify that circuit breaker opened in Step 2A(1) is open and tagged.

      (2) Connect wires to light and install boot over terminals.

      (3) Set light in mounting position and push into place.

      (4) Remove tag and close circuit breaker opened in Step 2A(1).

3. Relamping

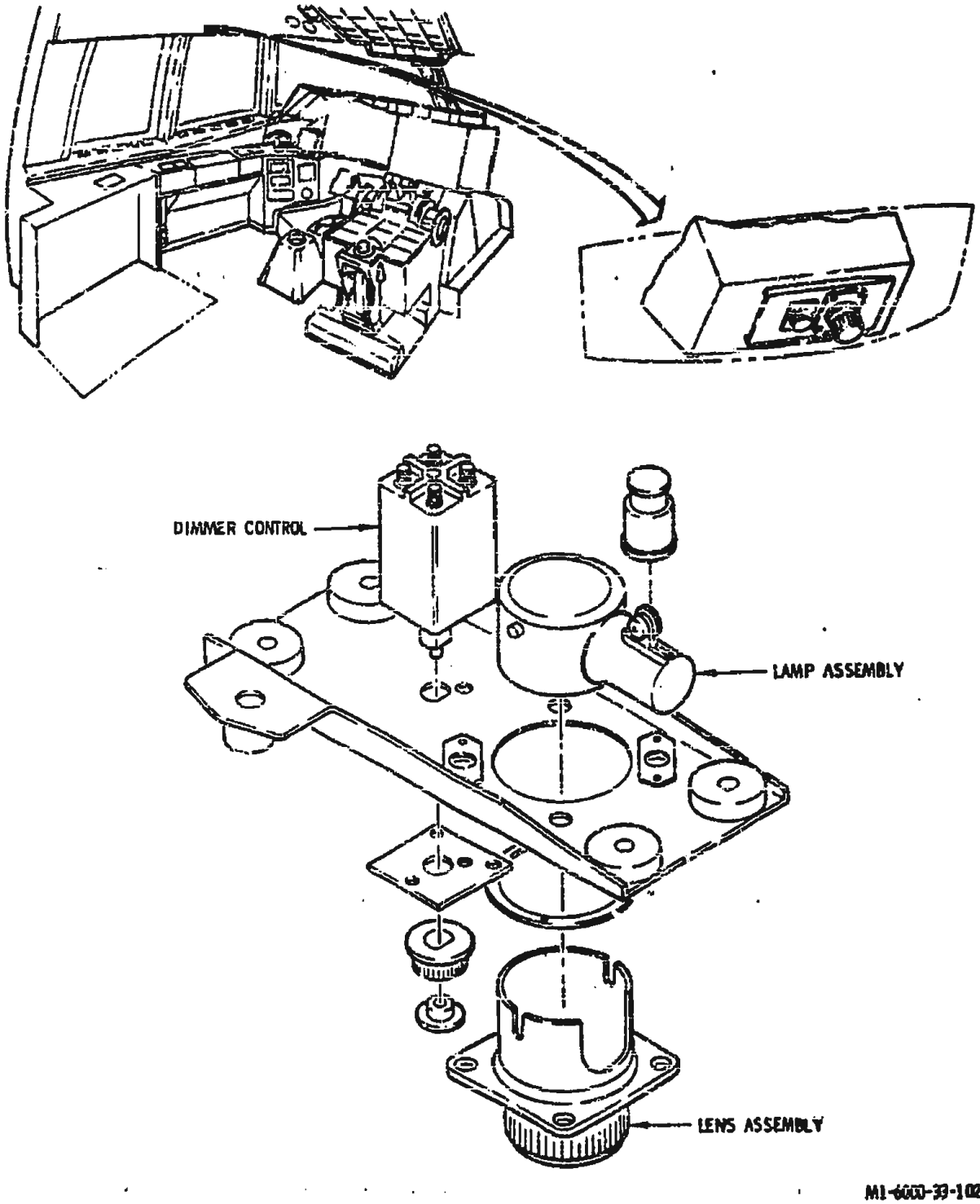
R A. Captains and First Officers Chart Light

      (1) On Flight Engineer/Second Officers overhead circuit breaker panel CB2, zone 215, open circuit breaker SIDE CONSOLE FLOOD (E8).

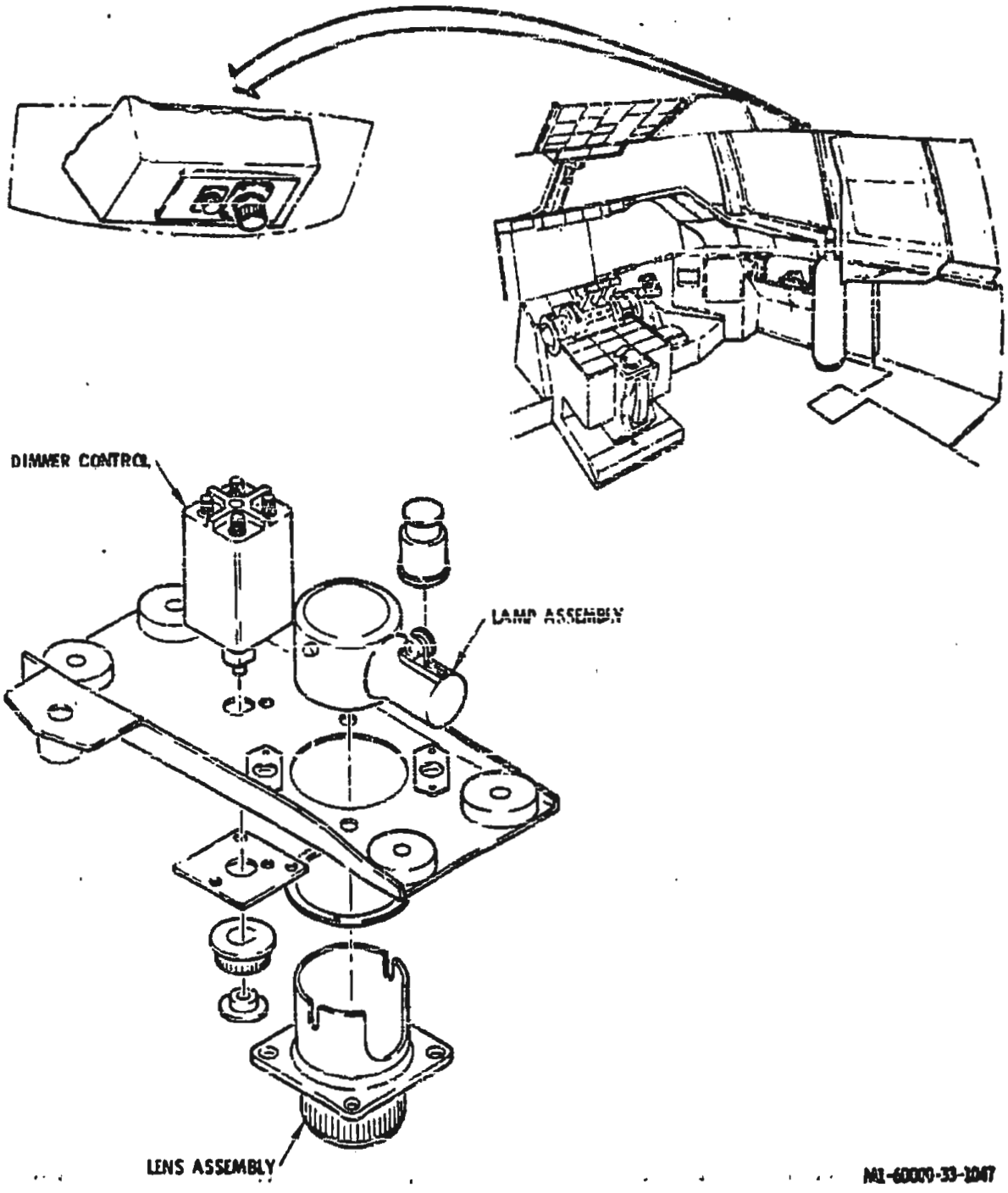
      (2) Grasp light and pull to release mounting studs, then maneuver clear of panel.

      (3) Depress 2 lockpins on lampholder to separate from housing.

      (4) Remove faulty lamp and install replacement lamp.



R Captains Chart Light - Removal and Installation
R Figure 401 (Sheet 1)



R First Officers Chart Light - Removal and Installation
R Figure 401 (Sheet 2)

R EFFECTIVITY: 032-999

R R (5) Depress 2 lockpins on lampholder and slide housing into place.

R (6) Set light in mounting position and push into place.

R (7) Close circuit breaker opened in Step 3A(1).

R (8) Turn on electrical power (Ref. 24-41-00).

R R (9) Turn on utility light to test lamp. Turn light off after test.

R (10) Turn off electrical power (Ref. 24-41-00).

R R

CAPTAINS AND FIRST OFFICERS CHART LIGHT DIMMER REMOVAL AND INSTALLATION

1. Referenced Procedure

24-41-00 External Power/Ground Service System - Maintenance Practices

2. Removal/Installation

A. Removal

(1) On Flight Engineers/Second Officers overhead circuit breaker panel CB2, zone 215, open and tag circuit breaker SIDE CONSOLE FLOOD (E8).

(2) Remove push button and index knob from dimmer control (Ref. Fig. 401 - Sheet 1 of 2).

(3) Gain access to the rear of the panel supporting the dimmer (Ref. Fig. 401).

(4) Tag and remove the wires from rear of the dimmer.

(5) Remove the nuts and washer securing the dimmer to its supporting panel. Remove the dimmer.

B. Installation

(1) Verify that circuit breaker opened in Step 2A(1) is opened and tagged.

(2) Install the dimmer and secure it to its supporting panel with nuts and washer.

(3) Remove tags and connect wires to terminals on the rear of the dimmer.

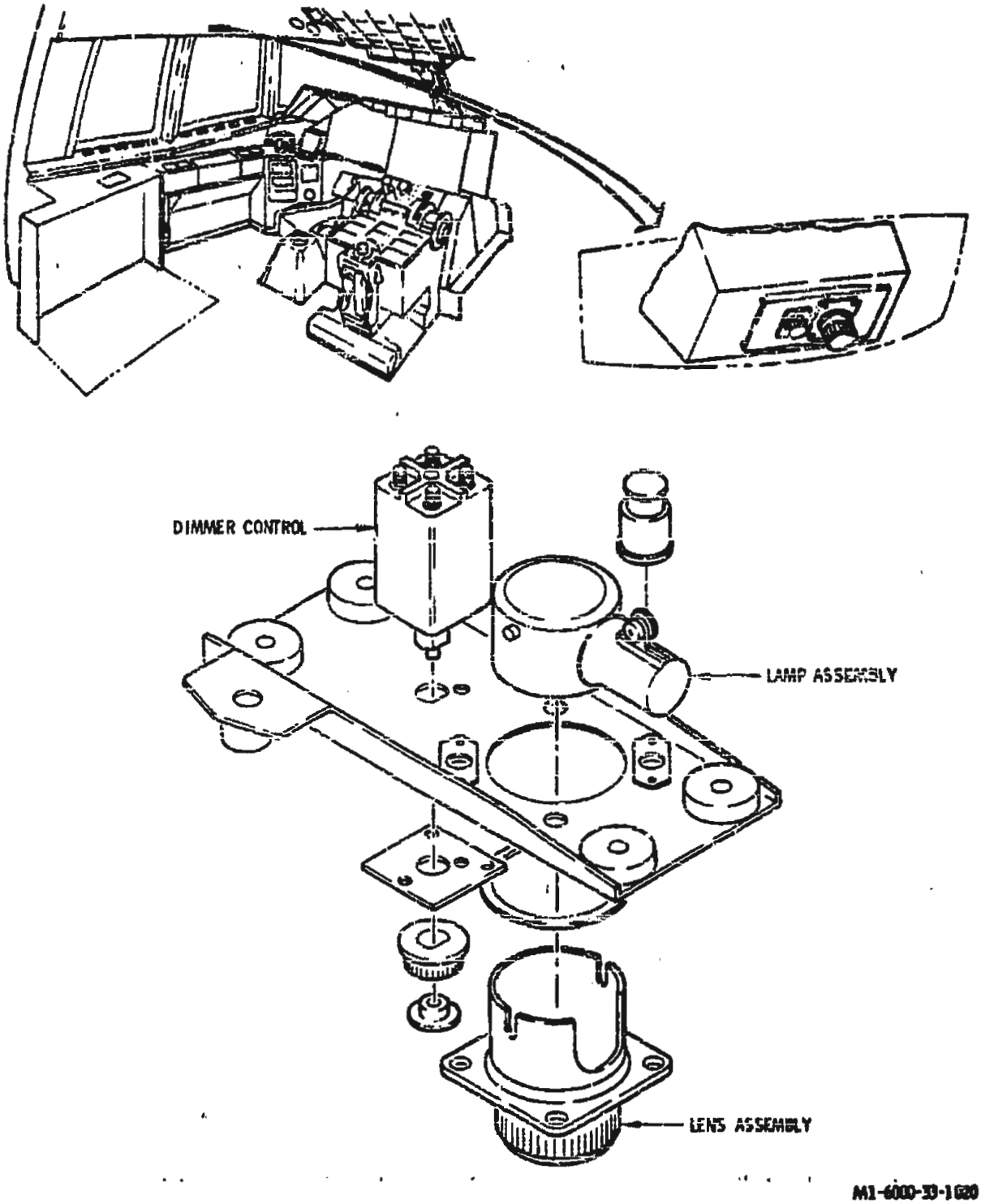
(4) Replace panel.

(5) Replace index knob and push button.

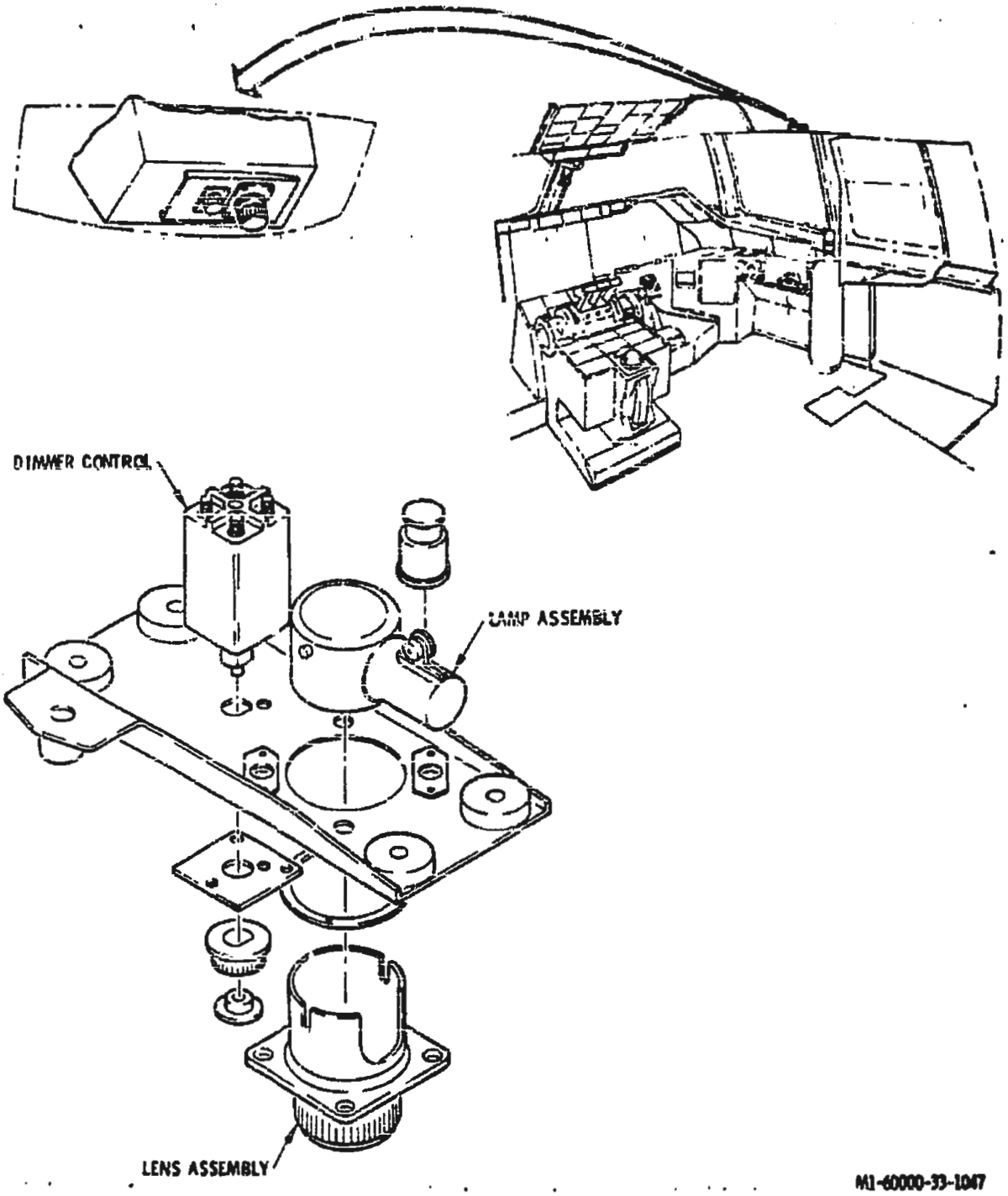
(6) Remove tag and close circuit breaker opened in Step 2A(1).

(7) Turn on electrical power (Ref. 24-00-00).

(8) Turn on the chart light by depressing push button. Verify that the chart light comes on.



R Captains Chart Light Dimmer - Removal and Installation
R Figure 401 (Sheet 1)



R First Officers Chart Light Dimmer - Removal and Installation
R Figure 401 (Sheet 2)

R EFFECTIVITY: 032-999
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001B

R (9) Rotate the dimming control from DIM to BRT and verify
R that the light intensity varies smoothly.

R (10) Depress the chart light push button and verify that the
R chart light goes out.

R (11) Turn off electrical power (Ref. 24-00-00).

R CAPTAINS AND FIRST OFFICERS SIDE CONSOLE FLIGHT KIT LIGHT
R REMOVAL AND INSTALLATION

R 1. Referenced Procedure

R 24-41-00 External Power/Ground Service System - Maintenance
R Practices

R 2. Removal/Installation

R A. Removal

R (1) On Flight Engineer/Second Officers overhead circuit
R breaker panel CB2, zone 215, open and tag circuit
R breaker FLT KIT - FLOOD - LIGHTS (E7).

R (2) Remove lens assembly (Ref. Fig. 401).

R (3) Remove Flight Kit Light mounting screws.

R (4) Disconnect and tag wires.

R B. Installation

R (1) Verify that circuit breaker opened in Step 2A(1) is
R open and tagged.

R (2) Remove tags and connect wires to light terminals.

R (3) Remove lens assembly.

R (4) Set light into position and secure with mounting
R screws.

R (5) Install lens assembly.

R (6) Remove tag and close circuit breaker opened in Step
R 2A(1).

R (7) Turn on electrical power (Ref. 24-00-00).

R (8) On Captains Headset Stowage and Jack Panel, position
R Flight Kit Light to ON, verify light comes ON (Ref.
R 23-51-00).

R (9) Rotate intensity control from full counter-clockwise to
R clockwise and back again. Verify intensity first
R increases gradually then decreases.

R (10) Turn off light and power after test.

R 3. Relamping

R A. Side Console Flight Kit Light

R (1) Remove lens assembly.

R (Ref. Fig. 401)

R (2) Remove faulty lamp.

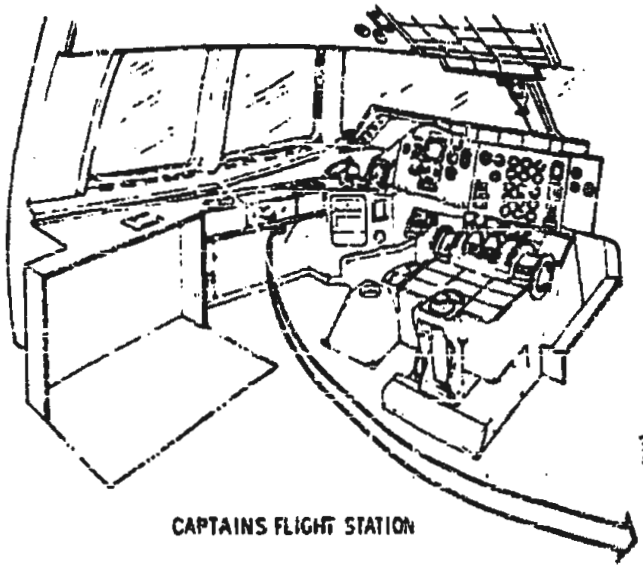
R (3) Install replacement lamp.

R (4) Turn on electrical power (Ref. 24-00-00).

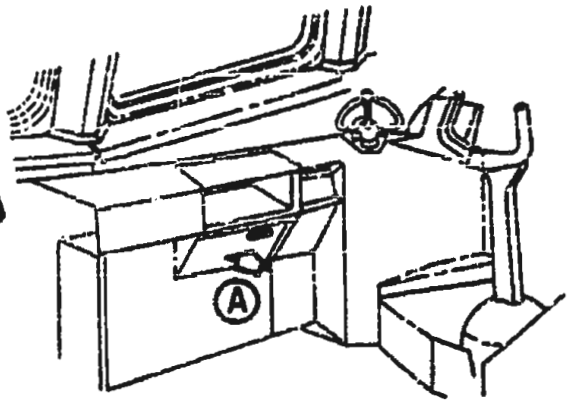
R (5) Turn on light to test lamp. Turn light off after test.

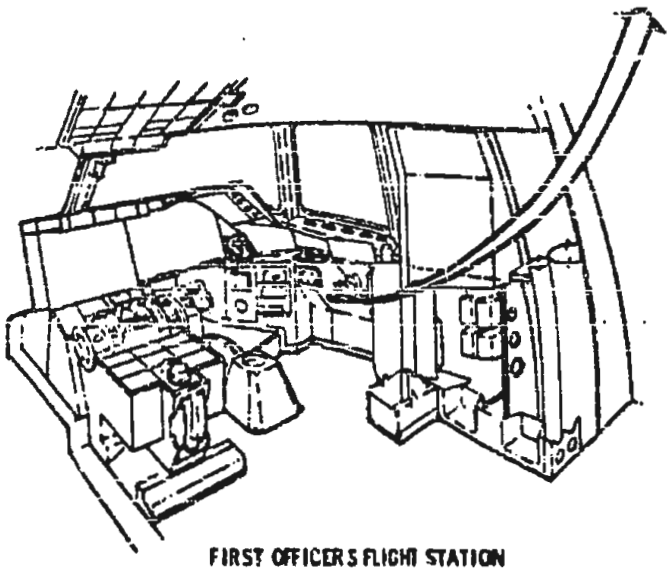
R (6) Install lens and hood.

R (7) Turn off electrical power (Ref. 24-00-00).

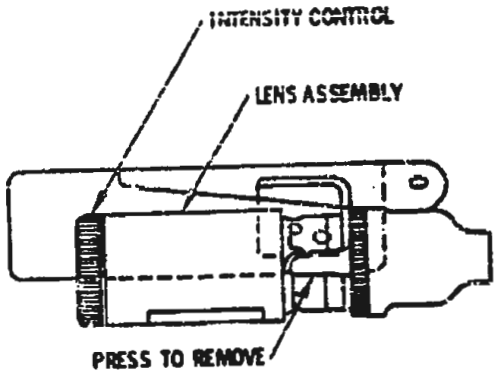


CAPTAINS FLIGHT STATION





FIRST OFFICERS FLIGHT STATION



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R CAPTAINS AND FIRST OFFICERS FLIGHT KIT LIGHTS - Removal and
R Installation
R Figure 401

R EFFECTIVITY: 032-999
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INTEGRAL PANEL LIGHTING - DESCRIPTION AND OPERATION

1. General

Flight station integral panel lighting (Ref. Fig. 1) is similar to integral instrument lighting (Ref. 33-11-00). In the case of the pilots instrument and glareshield panels, instrument and panel integral lighting circuits are combined. A typical integral lighting 5V ac bus circuit is shown in Fig. 2.

2. Eye Locator and Approach Chart Holder Lights

A. Description and Operation

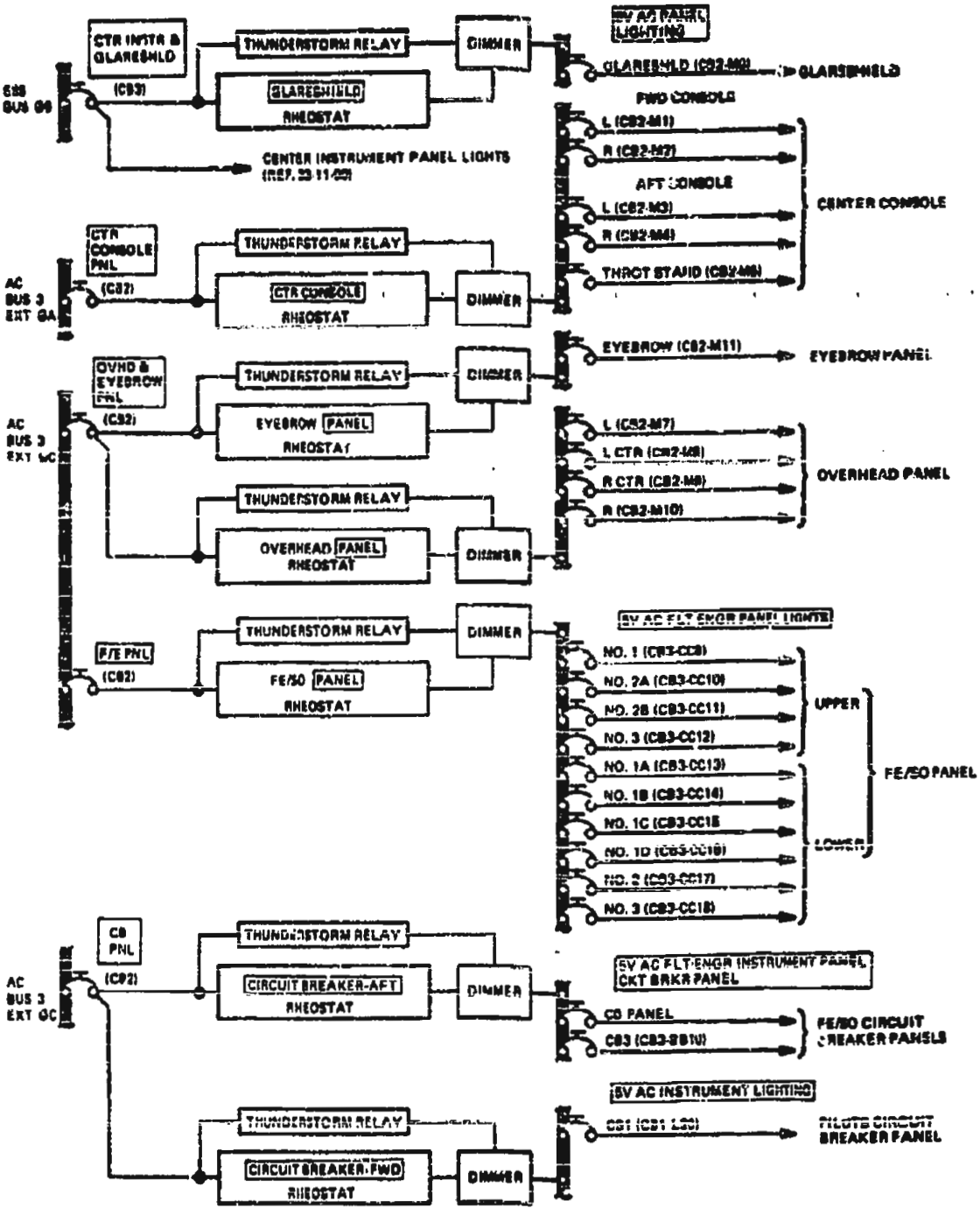
The eye locator and approach chart holder (Ref. 25-12-00) also incorporates integral 5V ac lighting (Ref. Fig. 3). A transformer in the forward electronic service center, zone 112 (Ref. 25-12-28), provides 5V ac power to a single circuit breaker for the two circuits. The eye locator lights are controlled by a switch on the pilots eyebrow panel; the lights are not dimmable. Power is provided to the approach chart lights when the holder is inserted in its receptacle; light intensity is controlled by a potentiometer located on the approach chart holder.

3. Dimmer

A. Description and Operation

R The incandescent lamp dimmer is a solid state device which controls integral lighting intensity. Dimmer input voltage is 115V ac; output voltage can be varied between 0.75 and 5.0V ac. All inputs to the dimmer are through a connector; the outputs (low-voltage and ground) are through terminal posts. A total of 11 dimmers of 4 different types are used in the integral instrument and panel lighting systems. The dimmers are located in the forward electronic service center, zone 112, at the left side of the flight station, zone 211, and at the Flight Engineers/Second Officers station, zone 215 (Ref. Fig. 4). The four types of dimmers vary in power output as follows:

Type	Rating
I	50VA
II	100VA
III	150VA
IV	300VA



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R
R

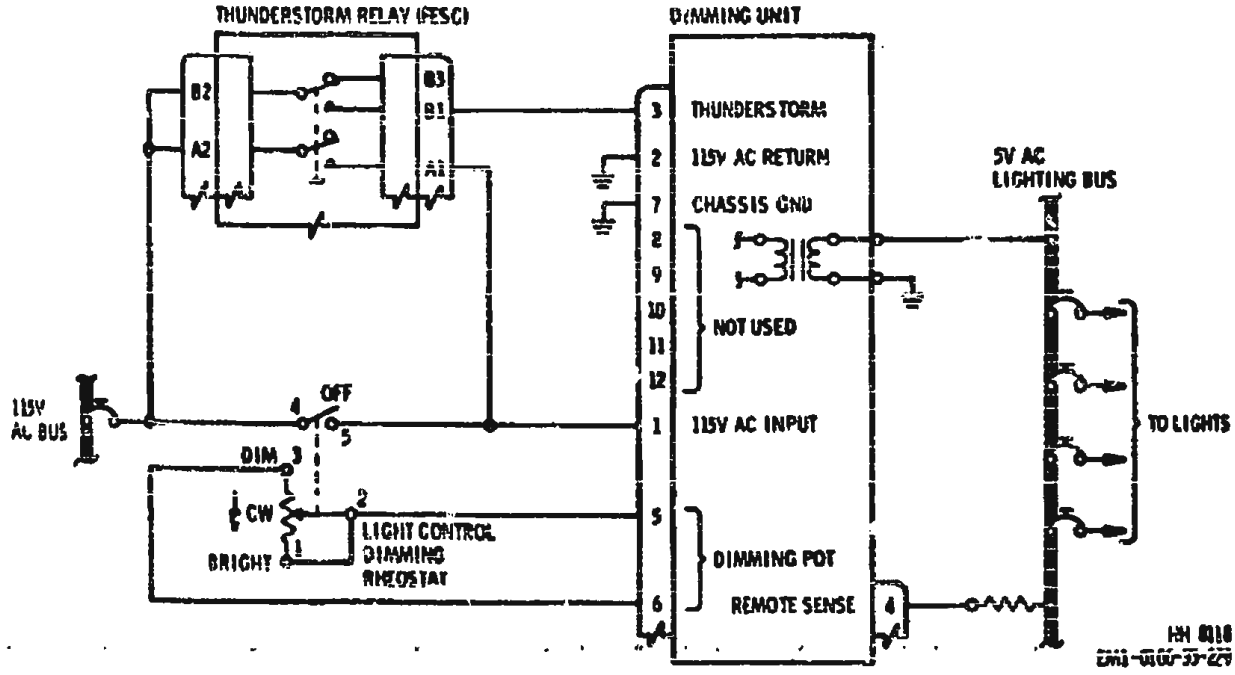
Integral Panel Lighting
Figure 1

The dimmer is controlled by a rheostat and a thunderstorm relay (Ref. Fig. 2). The dimmer output voltage, which is sensed at the 5V ac instrument bus, is also fed back to the dimmer control circuit.

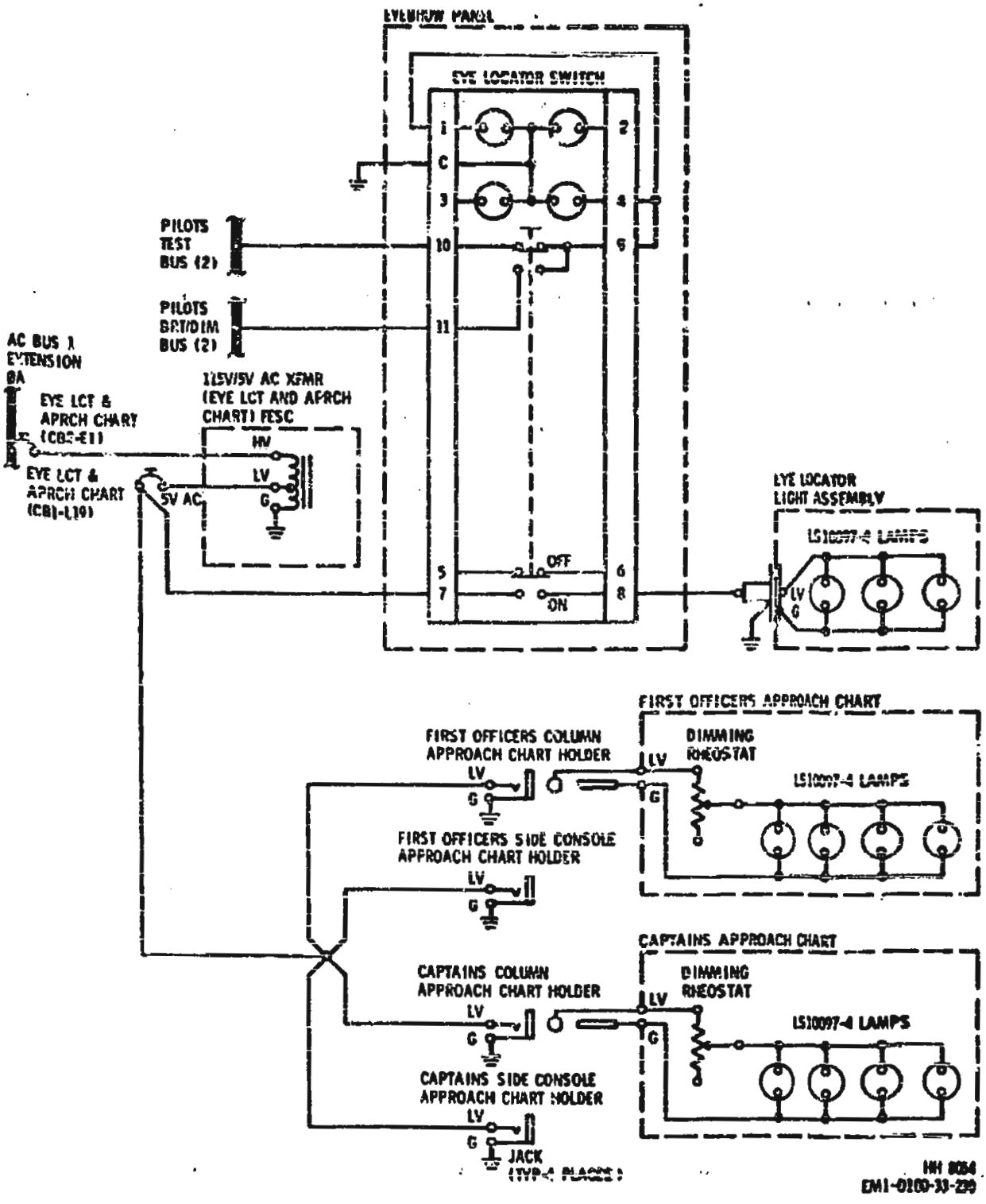
4. Rheostat

A. Description

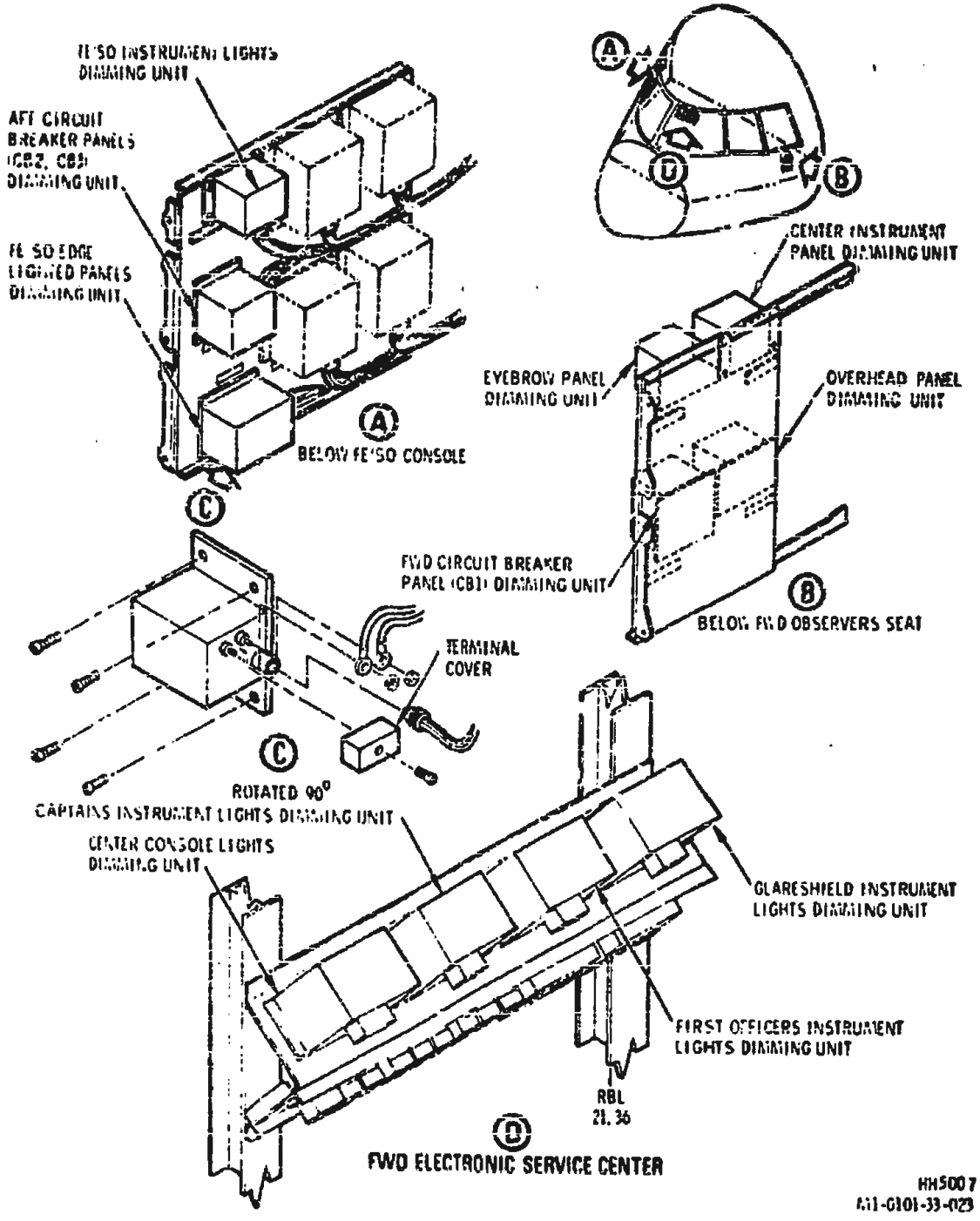
A light control rheostat is provided for each dimmer. The rheostat incorporates an integral on/off switch.



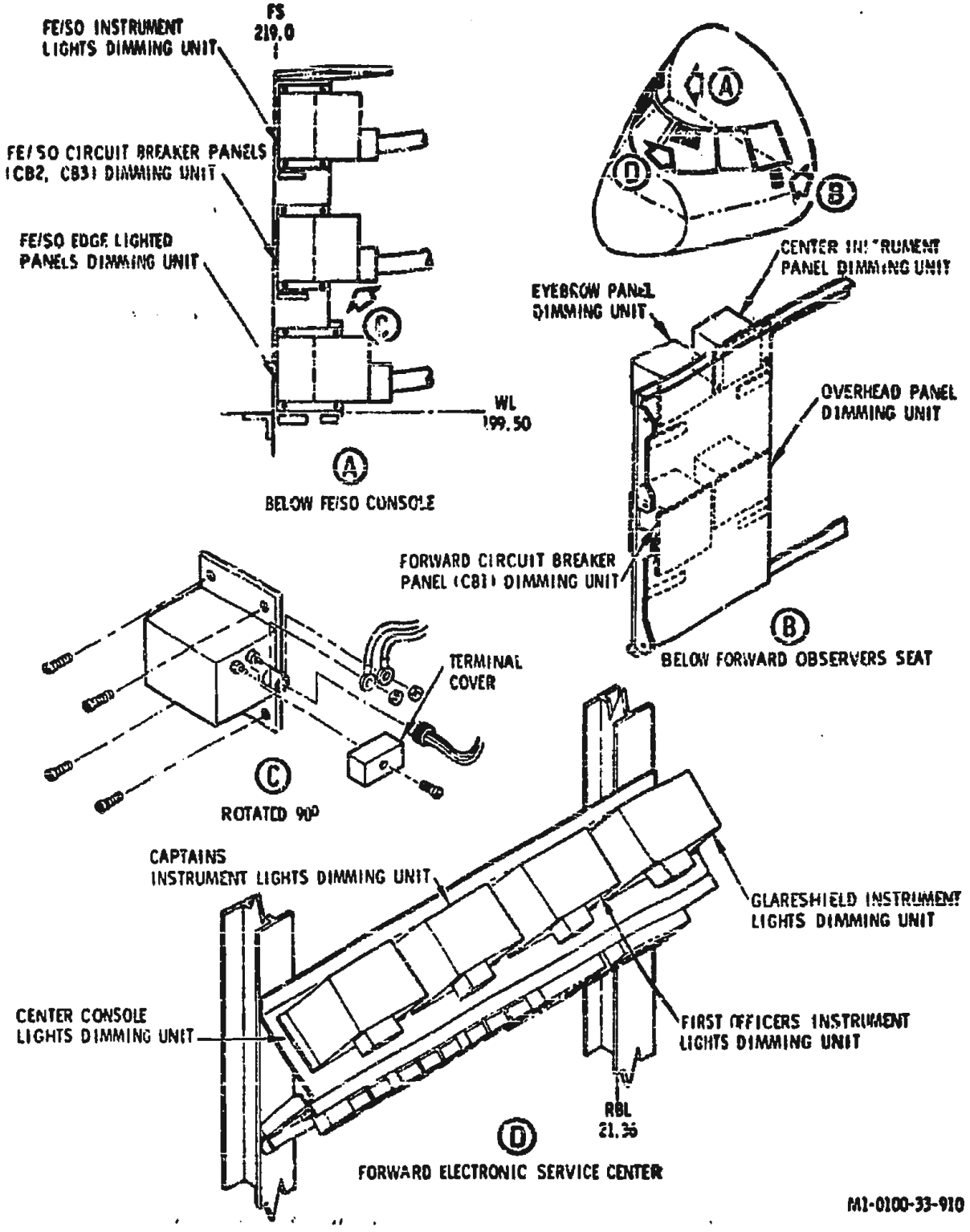
Typical Integral Lighting Circuit
Figure 2



Eye Locator and Approach Chart Lights Schematic
Figure 3



Light Dimmers
Figure 4



Light Dimmers
Figure 4

EDGE-LIGHTED PANEL - REMOVAL AND INSTALLATION

1. Removal/Installation

NOTE: Location of printed circuit board electrical connector is indicated by blue cross (+) on front of panel.

A. Removal

(1) Remove any knobs or switchguards.

(2) Remove panel mounting screws.

(3) Pull panel away from mounting surface to disengage electrical connector (Ref. Fig. 401).

B. Installation

(1) Position panel to engage electrical connector.

(2) Apply pressure to panel at blue cross (+) to fully seat connector.

(3) Install panel mounting screws.

(4) Install any knobs or switchguards.

2. Relamping

A. Edge-lighted Panel

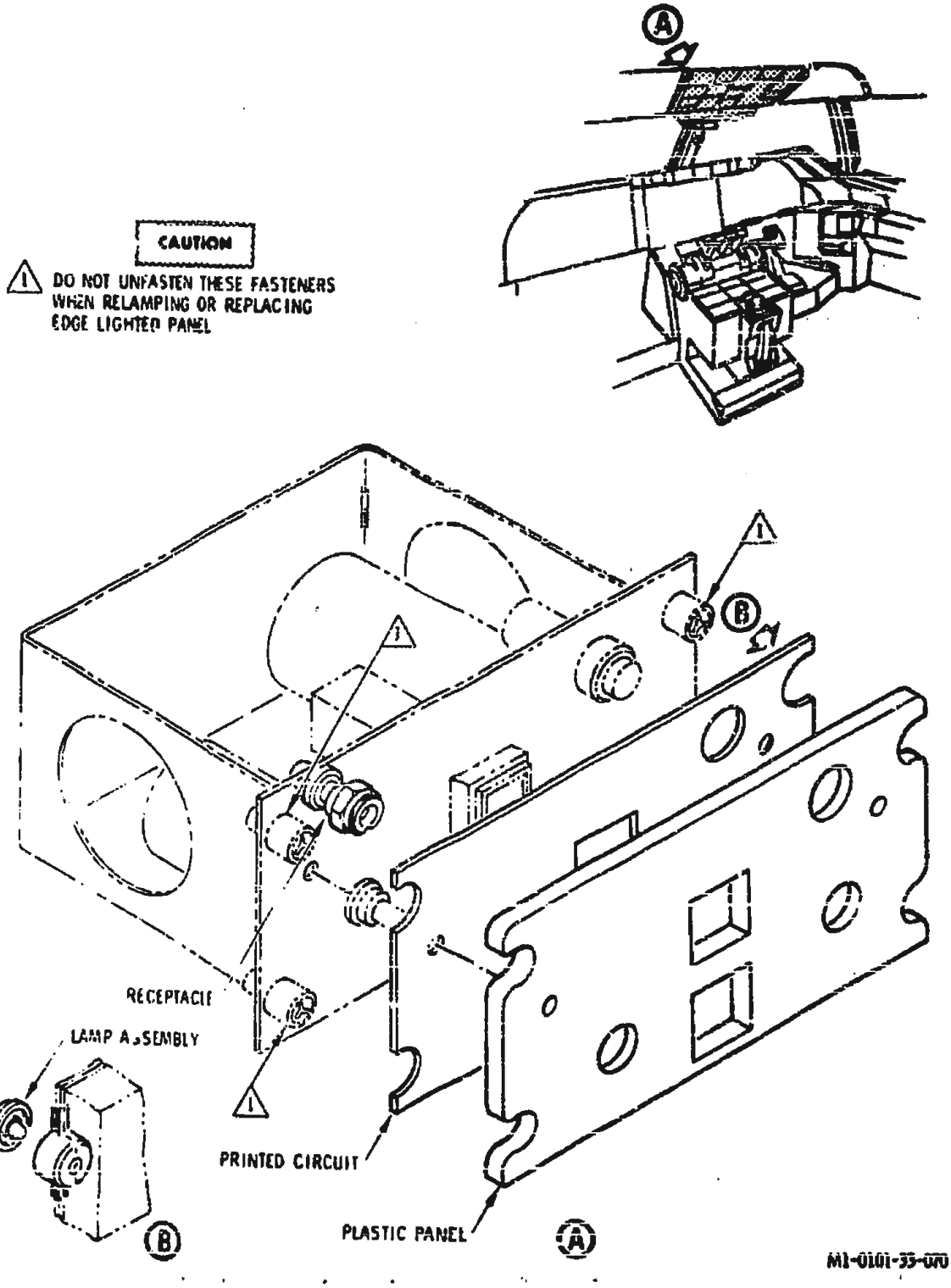
CAUTION: DO NOT UNFASTEN FASTENERS THAT HOLD UNIT IN PLACE WHEN REPLACING LAMPS OR EDGE LIGHTED PANELS.

(1) Remove panel (Ref. Step 1A).

(2) On back side of panel, remove faulty lamp using small screwdriver.

(3) Install replacement lamp.

(4) Install panel (Ref. Step 1B).



R Edge Lighted Panel - Removal and Installation
R Figure 401

INTEGRAL PANEL LIGHT DIMMER - REMOVAL AND INSTALLATION

1. Referenced Procedure

24-00-00 Electrical Power - Maintenance Practices

2. Removal/Installation

A. Removal

(1) On Flight Engineer/Second Officers overhead circuit breaker panel CB2 and Flight Engineer/Second Officers aft circuit breaker panel CB3 zone 215, open and tag circuit breaker as follows:

DIMMER	CIRCUIT BREAKER
Glareshield panel	CTR INSTR & GLARESHIELD (J13) CB3
Center console panel	CTR CONSOLE PNL (E10) CB2
Eyebrow or overhead panel	OVHD & EYEBROW PNL (E3) CB2
Flight Engineer/Second Officers panel	F/E PNL (E2) CB2
Pilots overhead circuit breaker panel	CKT BRKR PNL (E11) CB2
FE/SO circuit breaker panel	CKT BRKR PNL (E11) CB2

(2) Gain access to dimmer (Ref. Fig. 401).

(3) Disconnect electrical connector.

(4) Disconnect and tag wires from G and LV terminals.

(5) Remove mounting screws and dimmer.

B. Installation

(1) Verify that circuit breaker opened in Step 2A(1) is open and tagged.

(2) Set dimmer in place and install mounting screws.

(3) Install electrical connector.

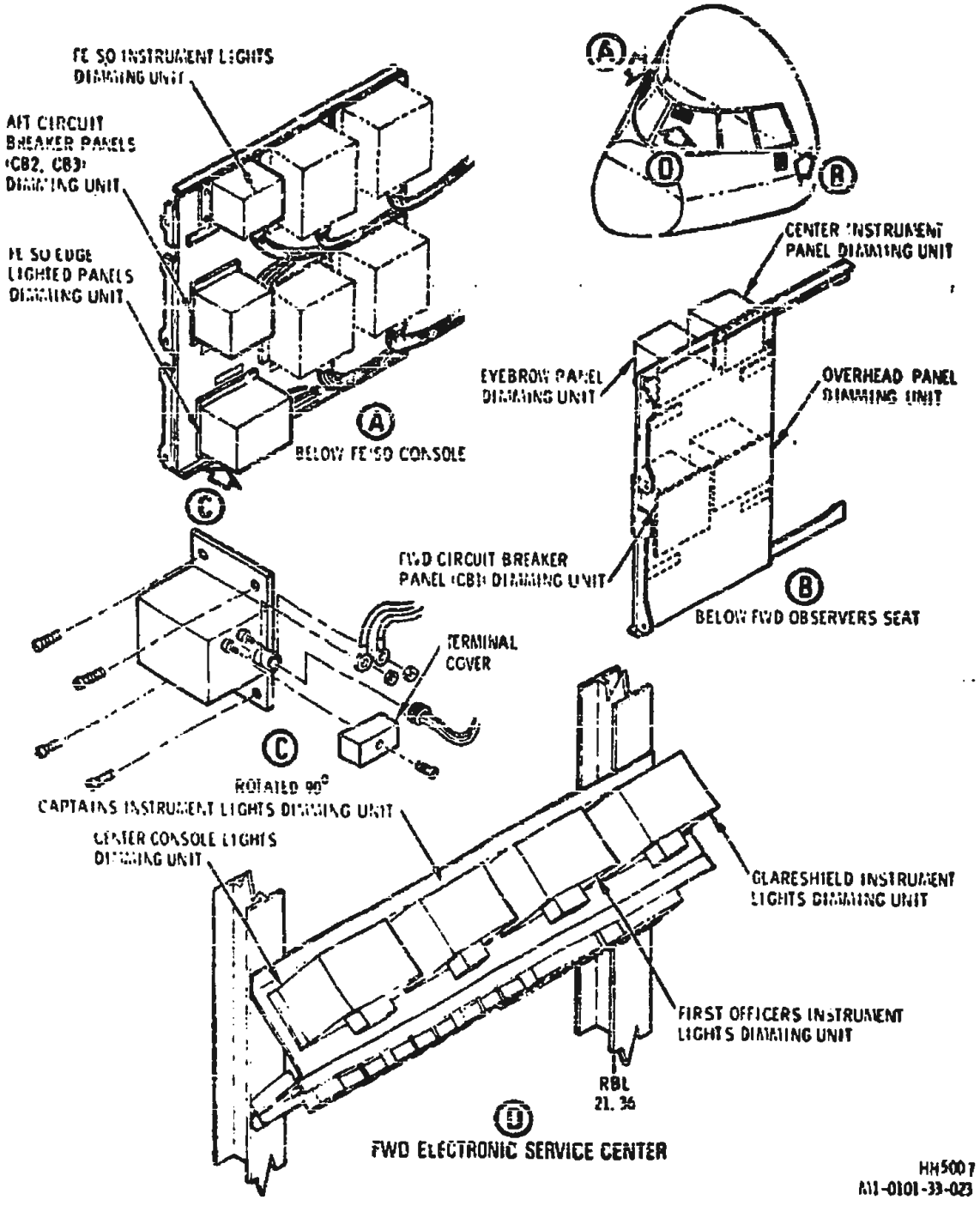
(4) Connect wires to G and LV terminals and remove tags.

(5) Remove tag and close circuit breaker opened in Step 2A(1).

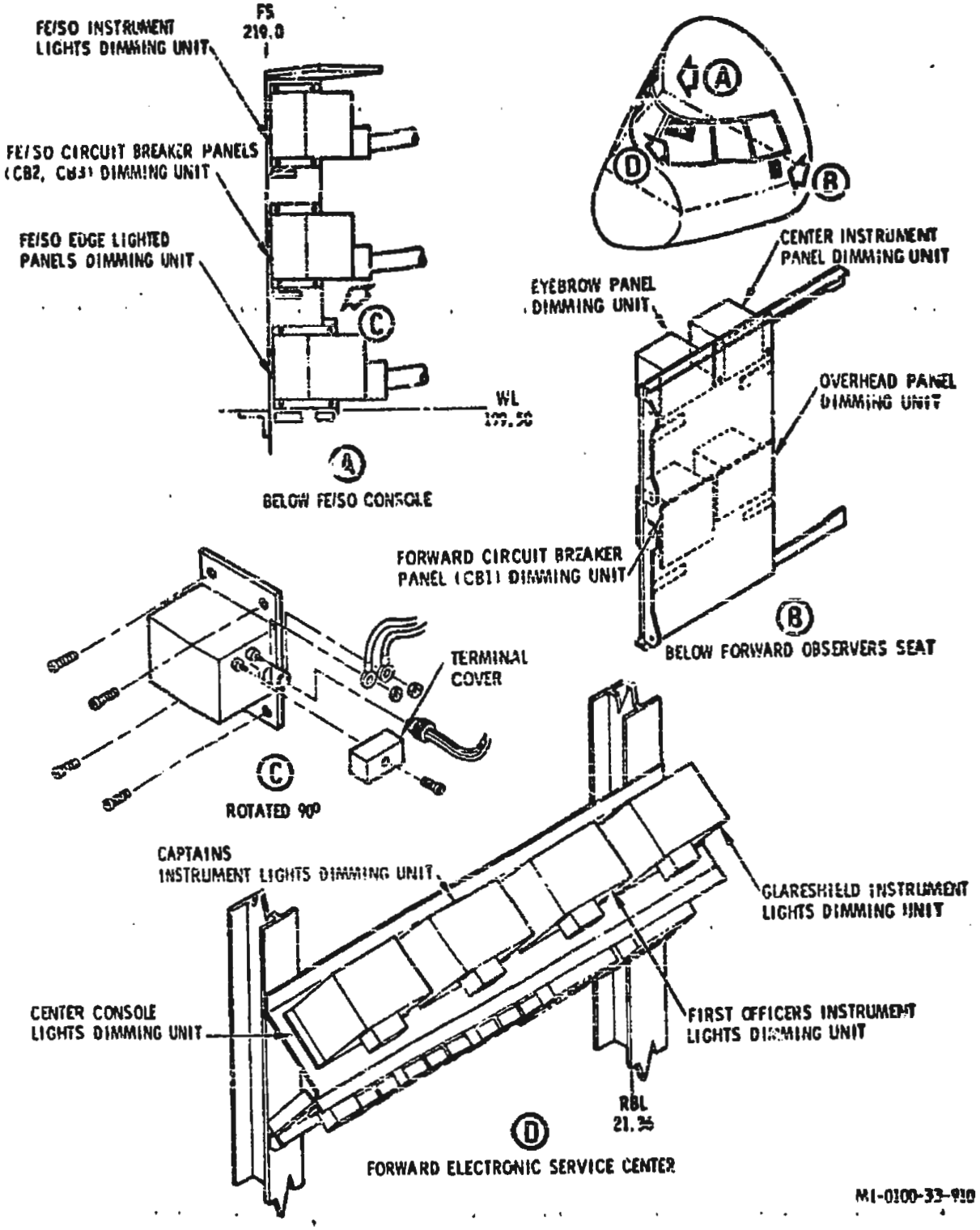
(6) Turn on electrical power (Ref. 24-00-00).

(7) Operate light control rheostat to test dimmer.

(8) Turn off electrical power (Ref. 24-00-00).



Dimmer - Removal and Installation
Figure 401



Dimmer - Removal and Installation
Figure 401

UTILITY LIGHTING - DESCRIPTION AND OPERATION

1. General

Individual utility lights (Ref. Fig. 1) are provided for each of the three flight crew members and the two observers. Each light has an adjustable cone of travel and a solid state dimming control.

The Captains utility light is mounted on the ceiling to the left of circuit breaker panel CB1, zone 210. The First Officers utility light is mounted on the ceiling to the right of circuit breaker panel CB1. A control marked UTILITY on the Captains glareshield side panel provides control of his utility light. A similar control on the First Officers glareshield side panel provides control of his utility light.

The Flight Engineer/Second Officers utility light is mounted on the upper portion of his console forward of the dual-purpose floodlight. The utility light is controlled by a DESK UTILITY control mounted on the LIGHTS panel (lower left edge of the desk).

The First Observers utility light and control are mounted on the underside of the upper sill trim at the left rear window. The Second Observers utility light and control are mounted on the underside of his equipment holder.

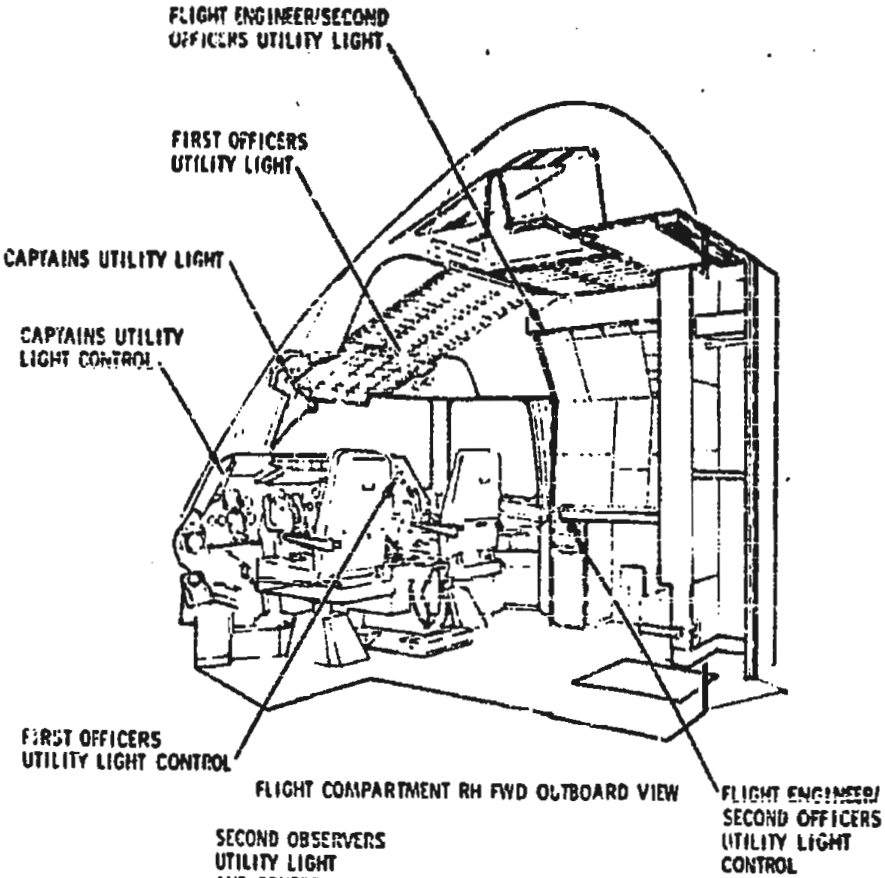
2. Operation

The dimming control of the utility light is a potentiometer which adjusts the bias of a solid state circuit (Ref. Fig. 2). The shaft of this potentiometer incorporates an on/off switch that changes state each time it is pressed. The 28V dc essential bus supplies power through the CREW UTILITY LTS circuit breaker on panel CB3, zone 215, through the switch and brightness control to the lamp. This permits setting the control for the desired brightness. Opening and closing the switch does not disturb the setting.

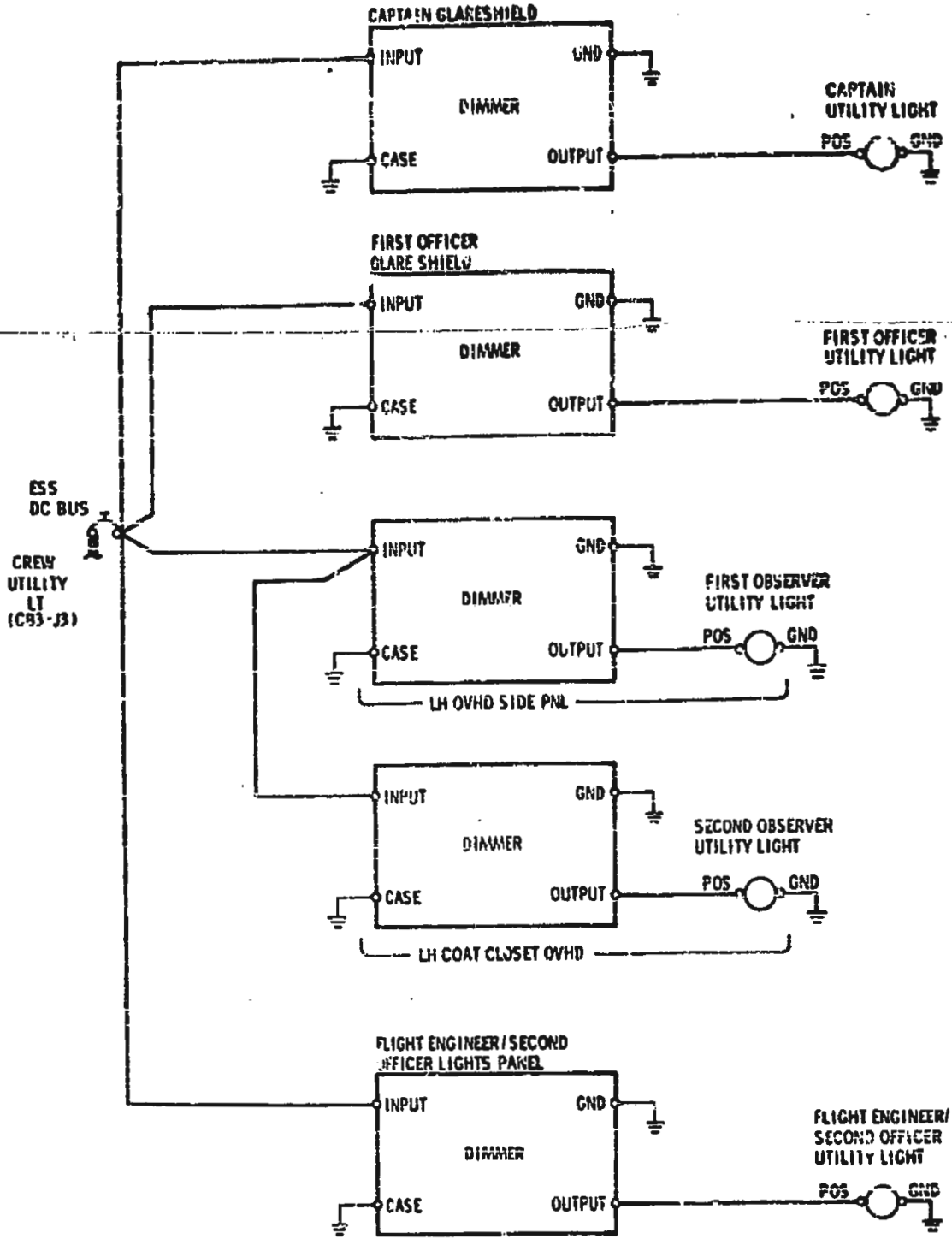
3. Solid State Utility Light Dimming Unit

A. Description and Operation

The utility light dimming unit contains a potentiometer, an alternate action pushbutton switch with concentric shafts, and a solid state circuit. The circuit consists of a power switch and an oscillator. The duty cycle of the oscillator


FLIGHT ENGINEER/SECOND OFFICERS UTILITY LIGHT
FIRST OFFICERS UTILITY LIGHT
CAPTAINS UTILITY LIGHT
CAPTAINS UTILITY LIGHT CONTROL
FIRST OFFICERS UTILITY LIGHT CONTROL
FLIGHT COMPARTMENT RH FWD OUTBOARD VIEW
FLIGHT ENGINEER/ SECOND OFFICERS UTILITY LIGHT CONTROL
SECOND OBSERVERS UTILITY LIGHT AND CONTROL
FIRST OBSERVERS UTILITY LIGHT AND CONTROL
FLIGHT COMPARTMENT-LH AFT-OUTBOARD VIEW
HH 8999
M1-0100-33-237

R Utility Lights Component Location
R Figure 1



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EM1-0100-33-210

R Utility Lights Schematic Diagram
R Figure 2

R EFFECTIVITY: ALL
R
050B

is varied as a function of the potentiometer setting. The oscillator provides a pulsating dc voltage of approximately 400 Hz to the power switch (emitter-follower output circuit). The output voltage varies from +11.5 to +26 volts in direct proportion to the oscillator duty cycle.

PILOTS AND OBSERVERS UTILITY LIGHTS - REMOVAL AND INSTALLATION

1. Referenced Procedure

R 24-00-00 Electrical Power - Maintenance Practices

2. Removal/Installation

A. Removal

(1) On Flight Engineers/Second Officers aft circuit breaker panel CB3, zone 215, open and tag circuit breaker INTERIOR LIGHTS - CREW UTILITY LT.

(2) Remove light retaining screw.

(3) Grasp light and pull to release mounting studs, then maneuver clear of panel.

(4) Slide boot off wire terminals, then disconnect and tag wires.

B. Installation

(1) Verify that circuit breaker opened in Step 2A(1) is open and tagged.

(2) Connect wires to light and install boot over terminals.

(3) Set light in mounting position and push into place.

(4) Install light retaining screw.

(5) Remove tag and close circuit breaker opened in Step 2A(1).

3. Relamping

A. Pilots and Observers Utility Light

(1) On Flight Engineer/Second Officers aft circuit breaker panel CB3, zone 215, open circuit breaker INTERIOR LIGHTS - CREW UTILITY LT.

(2) Remove light retaining screw.

(3) Grasp light and pull to release mounting studs, then maneuver clear of panel.

(4) Depress 2 lockpins on lampholder to separate from housing.

(5) Remove faulty lamp and install replacement lamp.

(6) Depress 2 lockpins on lampholder and slide housing into place.

(7) Set light in mounting position and push into place.

(8) Install light retaining screw.

(9) Close circuit breaker opened in Step 3A(1).

R (10) Turn on electrical power (Ref. 24-00-00).

(11) Turn on utility light to test lamp. Turn light off after test.

R (12) Turn off electrical power (Ref. 24-00-00).

FLIGHT ENGINEER/SECOND OFFICERS UTILITY LIGHT - REMOVAL AND INSTALLATION

1. Referenced Procedure

R 24-00-00 Electrical Power - Maintenance Practices

2. Removal/Installation

A. Removal

(1) On Flight Engineer/Second Officers aft circuit breaker panel CB3, zone 215, open and tag circuit breaker INTERIOR LIGHTS - CREW UTILITY LT.

(2) Remove light cover (Ref. Fig. 401).

(3) Remove lamp.

(4) Remove mounting screws and lower light to gain access to wire terminals.

(5) Slide boot off wire terminals, then disconnect and tag wires.

B. Installation

(1) Verify that circuit breaker opened in Step 2A(1) is open and tagged.

(2) Remove tags, connect wires to light, and install boot over terminals (Ref. Fig. 401).

(3) Set light into mounting position and secure with mounting screws.

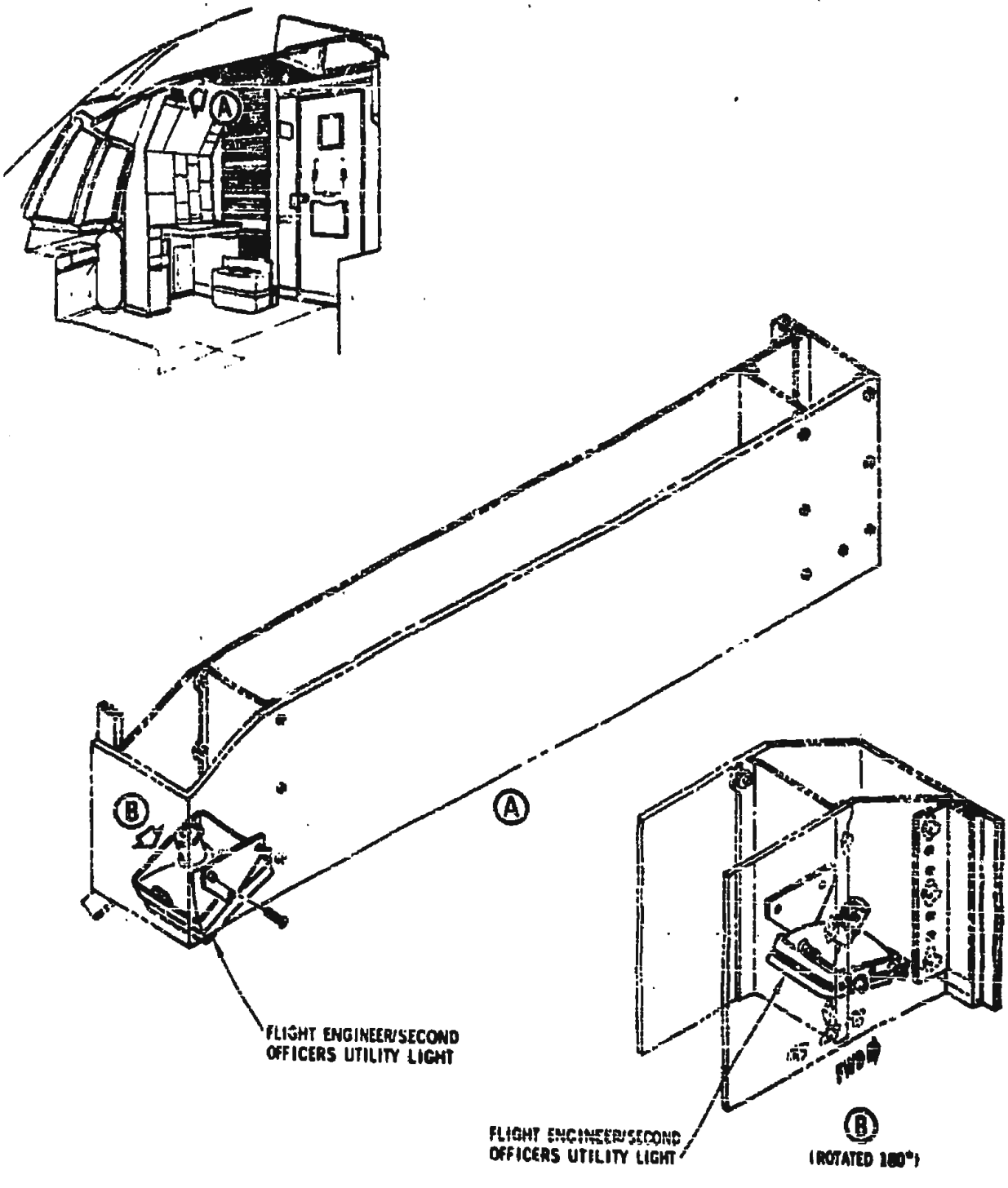
(4) Install lamp.

(5) Install light cover.

(6) Remove tag and close circuit breaker opened in Step 2A(1).

3. Relamping

A. Flight Engineer/Second Officers Utility Light



Flight Engineer/Second Officers Utility Light
Removal and Installation
Figure 401

(1) On Flight Engineer/Second Officers aft circuit breaker panel CB3, zone 215, open circuit breaker INTERIOR LIGHTS - CREW UTILITY LT.

(2) Remove light cover (Ref. Fig. 401).

(3) Remove faulty lamp.

(4) Install replacement lamp.

R (5) Turn on electrical power (Ref. 24-00-00).

(6) Close circuit breaker opened in Step 3A(1).

(7) Turn utility light on to test lamp. Turn light off after test.

R (8) Turn off electrical power (Ref. 24-00-00).

(9) Install light cover.

PILOTS AND OBSERVERS UTILITY LIGHT DIMMER REMOVAL AND INSTALLATION

1. Referenced Procedure

R 24-00-00 Electrical Power - Maintenance Practices

2. Removal/Installation

A. Removal

(1) On Flight Engineer/Second Officers aft circuit breaker panel CB3, zone 215, open and tag circuit breaker INTERIOR LIGHTS - CREW UTILITY LT.

(2) Remove knob from utility light control. (To replace pilots dimmer, also remove all other knobs on glareshield side panel, and remove edge-lighted panel.)

(3) Gain access to rear of panel supporting dimmer.

(4) Tag and remove wires from rear of dimmer.

(5) Remove nut and washer securing dimmer to its supporting panel. Remove dimmer.

B. Installation

(1) Verify that circuit breaker opened in Step 2A(1) is opened and tagged.

(2) Install dimmer and secure it to its supporting panel with nut and washer.

(3) Remove tags and connect wires to terminals on rear of the dimmer.

(4) Replace edge-lighted panel (pilots dimmers only).

(5) Replace knob(s).

(6) Remove tag and close circuit breaker opened in Step 2A(1).

R (7) Turn on electrical power (Ref. 24-00-00).

(8) Turn on utility light by depressing switch. Verify that utility light comes on.

(9) Rotate dimming control from DIM to BRT and verify that light intensity varies smoothly.

(10) Depress utility light switch to off position and verify that utility light goes out.

R (11) Turn off electrical power (Ref. 24-00-00).

ANNUNCIATOR SYSTEM - DESCRIPTION AND OPERATION

1. General

The annunciator system processes signals received from various aircraft systems. This processing, which occurs in the Indicator Lights Control Box, causes indicator lights on the pilots and Flight Engineer/Second Officers (FE/SO) instrument panels to turn on in either a bright or dim mode.

In addition, triggering of certain indicator lights causes the caution and warning lights on the pilots center instrument panel to turn on.

The annunciator system is comprised of the following:

- Indicator Lights Control Box (ILCB)
- Pilots and FE/SO LIGHTS control panel and test relays.
- All Flight Station Annunciator Lighting.

2. Indicator Lights Control Box

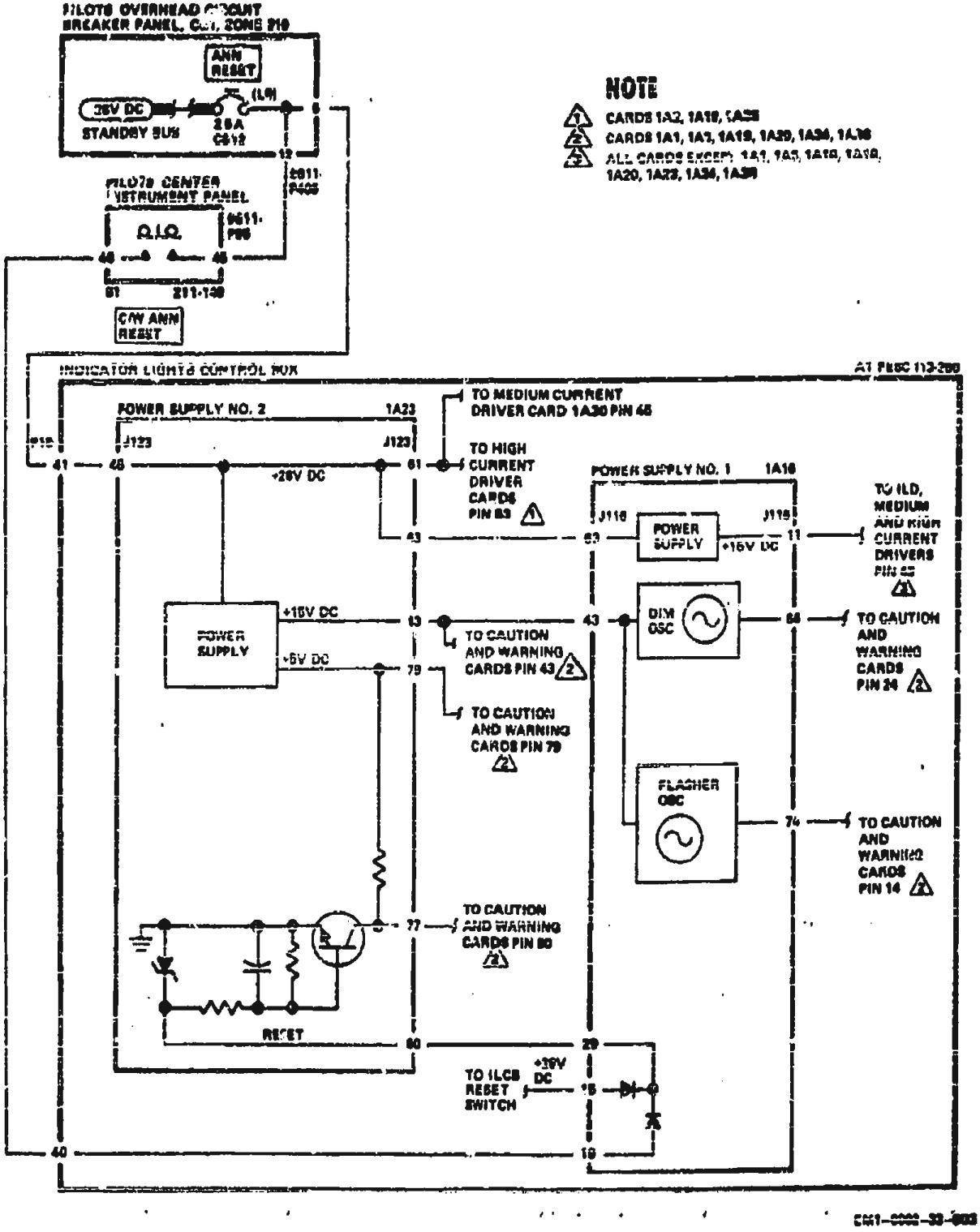
A. General

The ILCB is mounted in the Forward Electronics Service Center (FESC), Zone 113. A duct mounted on top of the box provides cooling air. The rear panel contains twenty-two connectors and is hinged to allow access to wiring within the ILCB. The hinged front panel allows removal and installation of the printed circuit (PC) cards. The inside of the front panel contains color-code decals which correspond to color-codes on the PC cards, and a placard which explains SELF-TEST PROCEDURES.

Three switches, 1. BRT/DIM NORMAL 2. TEST, NORMAL, TEST BITE 3. RESET, in a test panel at the top of the ILCB are used during line maintenance testing (Ref. 33-17-00 Adjustment and Test).

Power for the ILCB is provided from the 28V dc standby bus through ANN RESET (L9) circuit breaker on CB1 panel (Ref. Fig. 1). This circuit provides power for Power Supply Cards 1 and 2, and Pilot's Caution and Warning Annunciator panel RESET switch.

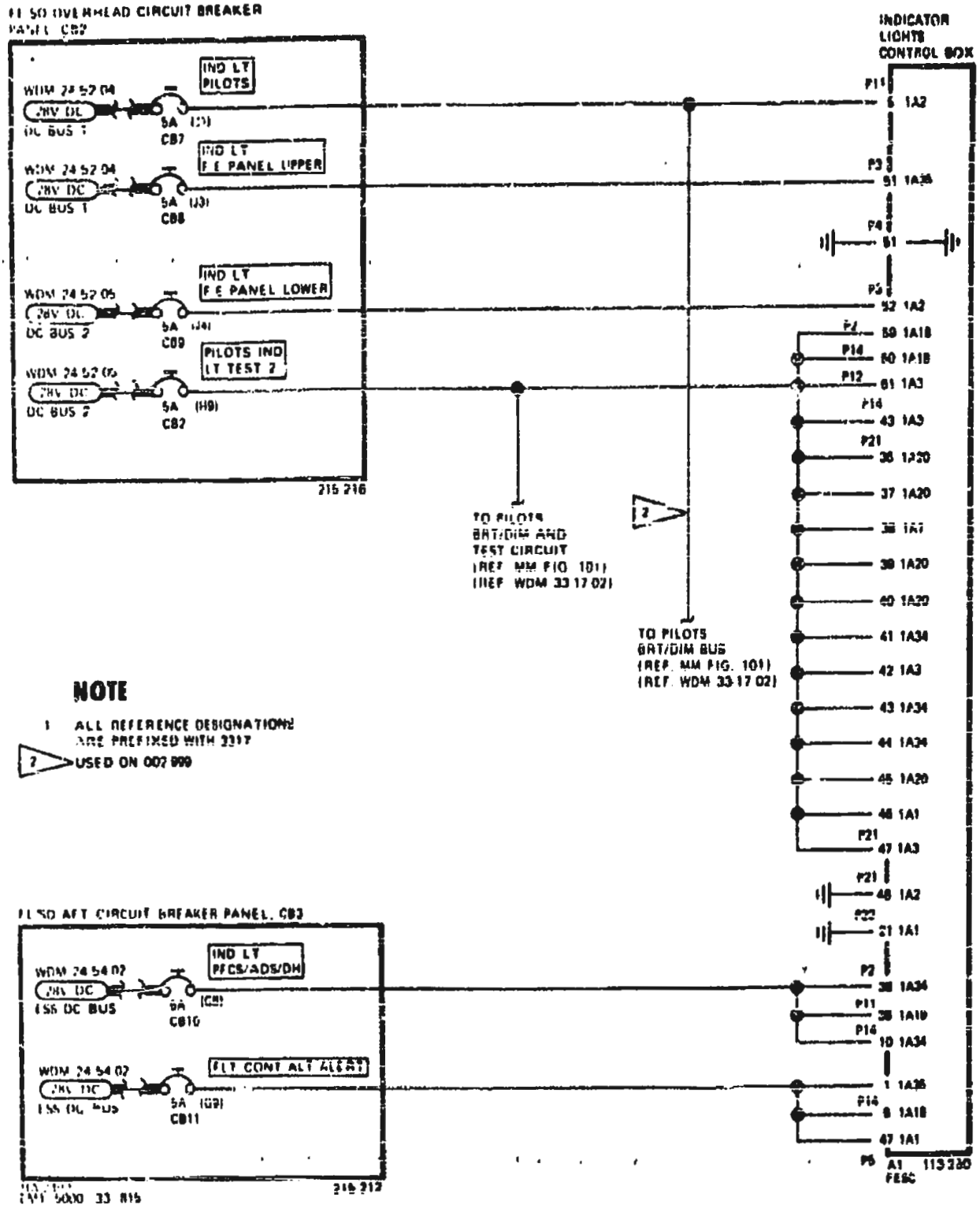
R Power for all annunciator light circuits in the ILCB is
R provided from external systems (Ref. F. Fig. 2).



NOTE

1. CARDS 1A2, 1A18, 1A28
2. CARDS 1A1, 1A7, 1A19, 1A29, 1A34, 1A36
3. ALL CARDS EXCEPT: 1A1, 1A5, 1A18, 1A19, 1A20, 1A23, 1A34, 1A39

R R Annunciator System Power Supply Schematic
Figure 1


INDICATOR LIGHTS CONTROL BOX
IND LT PILOTS
IND LT F E PANEL UPPER
IND LT F E PANEL LOWER
PILOTS IND LT TEST 2
TO PILOTS BRT/DIM AND TEST CIRCUIT (REF MM FIG 101) (REF WDM 33 17 02)
TO PILOTS BRT/DIM BUS (REF MM FIG. 101) (REF WDM 33 17 02)
NOTE
1 ALL REFERENCE DESIGNATIONS ARE PREFIXED WITH 2317
2 USED ON 007 999
IND LT PFCS/ADS/DH
FLT CONT ALT ALERT
FESC

R Annunciator System Power Control Circuit Schematic
R Figure 2

R The ILCB contains space for 36 PC cards although only 32 cards
R are installed. The front edge of each card contains 1 or 2
R Light Emitting Diodes (LED) used during SELF-TEST PROCEDURE to
R show failed cards. Each card slides into a 80-pin card
R connector and is secured in place by 2 locking levers.

R Six types of PC cards are used:

R • Individual Light Driver

R Card numbers - 1A5, 1A6, 1A7, 1A8, 1A9, 1A10, 1A12,
R 1A13, 1A14, 1A15, 1A17, 1A22, 1A24, 1A26, 1A27, 1A28,
R 1A29, 1A31, 1A32, 1A33.

R • Caution and Warning Light Driver

R Card numbers - 1A1, 1A3, 1A18, 1A20, 1A34, 1A36.

R • High Current Multiple Light Driver

R Card numbers - 1A2, 1A19, 1A35.

R • Medium Current Multiple Light Driver

R Card number - 1A30.

R • Power Supply No. 1

R Card number - 1A16.

R • Power Supply No. 2

R Card number - 1A23.

R 3. Individual Light Driver (ILD)

R A. General

R The ILD card contains twenty-five identical light driver
R circuits. Sixteen of these driver circuits have positive
R (+28V dc) inputs, and 9 have ground inputs (Ref. Fig. 8).

R Each driver circuit is controlled by a system switch or
R sensor and is capable of driving one 80-milliampere light.
R A current limiter monitors each driver circuit and turns off
R the circuit if a short is detected.

R One dimming oscillator, mounted on the card, allows all
R driver circuits to function in the bright (28V dc) or dim
R (14V dc) modes.

R The 20 ILD cards contain a total of 500 driver circuits
R although some of the circuits are not used.

R B. Operation

R Closing of a system switch or sensor applies a 28V dc input
R to a positive switched driver or a ground input to a
R negative switched driver. The input signal is applied to a
R pin on one of the 22 connectors on the ILCB rear panel and
R then wiring within the ILCB delivers the signal to the
R correct card connector pin and driver circuit.

R 4. Caution_and_Warning_(C+W)_Light_Driver

R A. General

R The C+W card has six identical light driver circuits. Each
R circuit drives one 80-milliampere light on the Pilots
R Caution and Warning Panel (Ref. Fig. 3). The six C+W cards
R provide a total of 36 light driver circuits.

R The card has a flashing and reset capability. The flashing
R function provides a flashing sequence for the first 10
R seconds the C+W light is on. The flashing rate is approx.
R 1.5 cycles per second.

R Although an input signal to the C+W driver circuit is
R present, the reset function enables the driver to be turned
R off by depressing the C/W ANN RESET switch adjacent to the
R C+W panel in the Flight Station. Resetting the driver
R circuit does not remove the associated system input.

R B. Operation

R The C+W card is capable of accepting 48 system inputs (24
R positive and 24 ground). These inputs are applied to six
R logic modules (Ref. Fig. 9).

R Each logic module receiving a positive input produces both
R an ac and a dc positive output. A ground input produces an
R ac and a dc ground output. All ac and dc outputs common to
R one logic module are or-wired through a programmable wiring
R matrix to their respective light driver circuit. Outputs
R from more than one logic module may be programmed to one
R light driver circuit. Ground dc outputs from the
R programmable wiring matrix are applied to an inverter stage
R which is powered by a source external to the ILCB.

R When a system input is applied to a C+W driver circuit, the
R reset level must be removed to turn the driver on. The ac
R positive or ground output from the logic module provides a

R signal to remove this reset level. This same signal also
R activates a 10 second timer. Power Supply No. 1 provides a
R pulsed input to the timer to provide the flashing sequence.
R After 10 seconds the C+W light remains on steady and the
R timer resets.

R When a C+W driver circuit has more than one system input
R associated with it, a flashing sequence can be initiated
R after the C+W light is on. A series of system inputs will
R produce a series of flashing sequences.

R 5. High Current Multiple Light Driver (HCD)

R A. General

R The HCD has five driver circuits, A through E (Ref. Fig.
R 10). Two of the drivers, A and C, are identical and can
R drive sixty 80-milliampere lights in parallel. Drivers B
R and D can drive five 80-milliampere lights in parallel.
R Driver E can drive twenty 80-milliampere lights in parallel.

R A dimming oscillator, mounted on the Medium Current Multiple
R Light Driver card 1A30 (Ref. Para. 6) provides dimming for
R all HCD cards. The pilots BRT/DIM switch controls the
R dimming function for drivers B, C, and E, while the FE/SO
R BRT/DIM switch controls the dimming function of drivers A
R and D.

R B. Operation

R Each light connected to an HCD operates independently of
R other lights connected to that same driver.

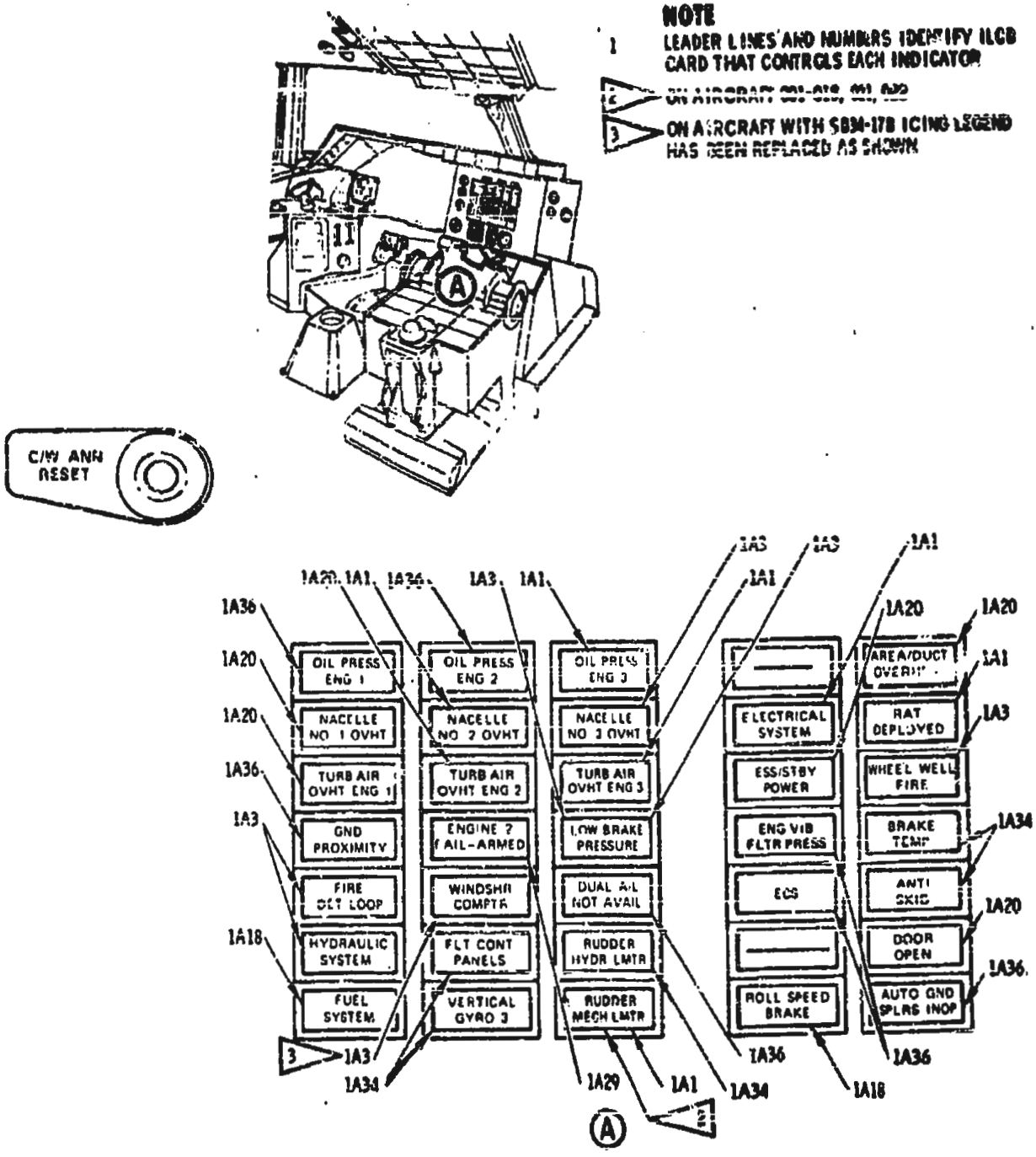
R Closing of a system sensor or switch allows 28V dc to be
R applied through the light driver circuit and indicator light
R to ground.

R Each driver circuit monitors the current for overload. If
R an overload is detected the driver turns off until the
R overload condition is removed.

R 6. Medium Current Multiple Light Driver (MCD)

R A. General

R The MCD (Ref. Fig. 11) has four driver circuits. Three of
R the drivers are capable of driving twenty 80-milliampere
R lights in parallel while the fourth driver is capable of
R driving 5 lights in parallel.



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CR
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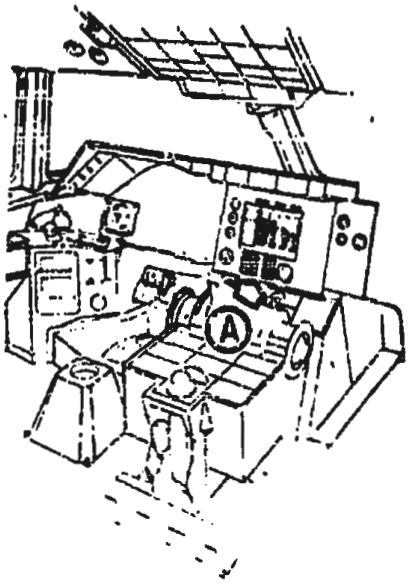
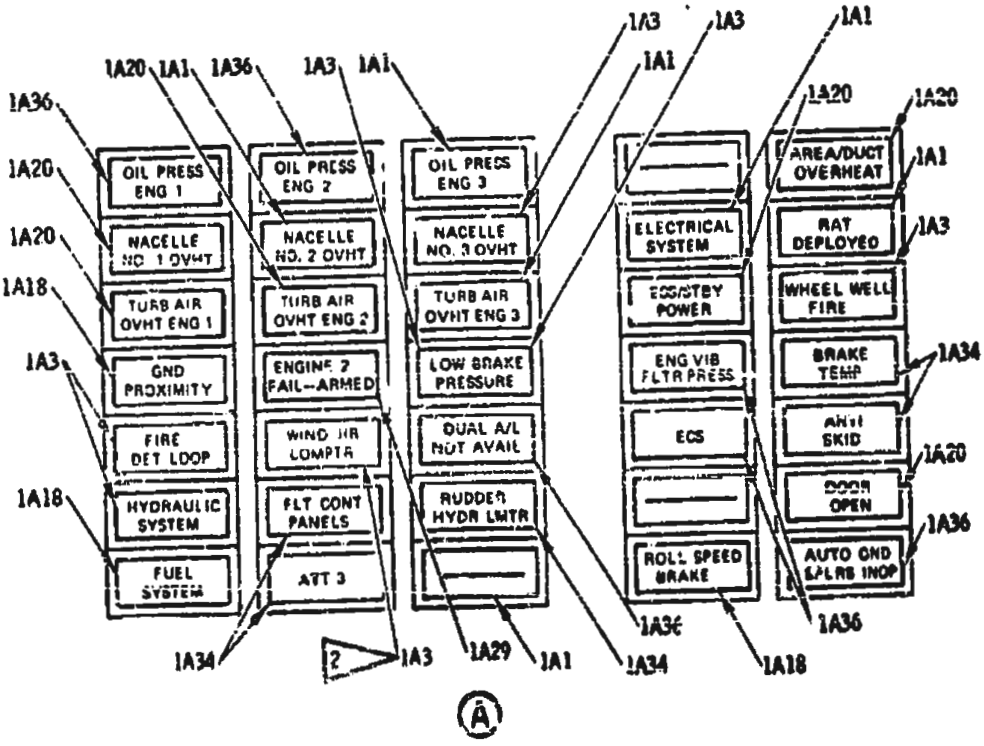
Pilots Caution and Warning Annunciator Lights
Figure 3



NOTE

1 LEADER LINES AND NUMBER IDENTIFY ILCB CARD THAT CONTROLS EACH INDICATOR

2 ON AIRCRAFT WITH SB34-178 ICING LEGEND HAS BEEN REPLACED AS SHOWN



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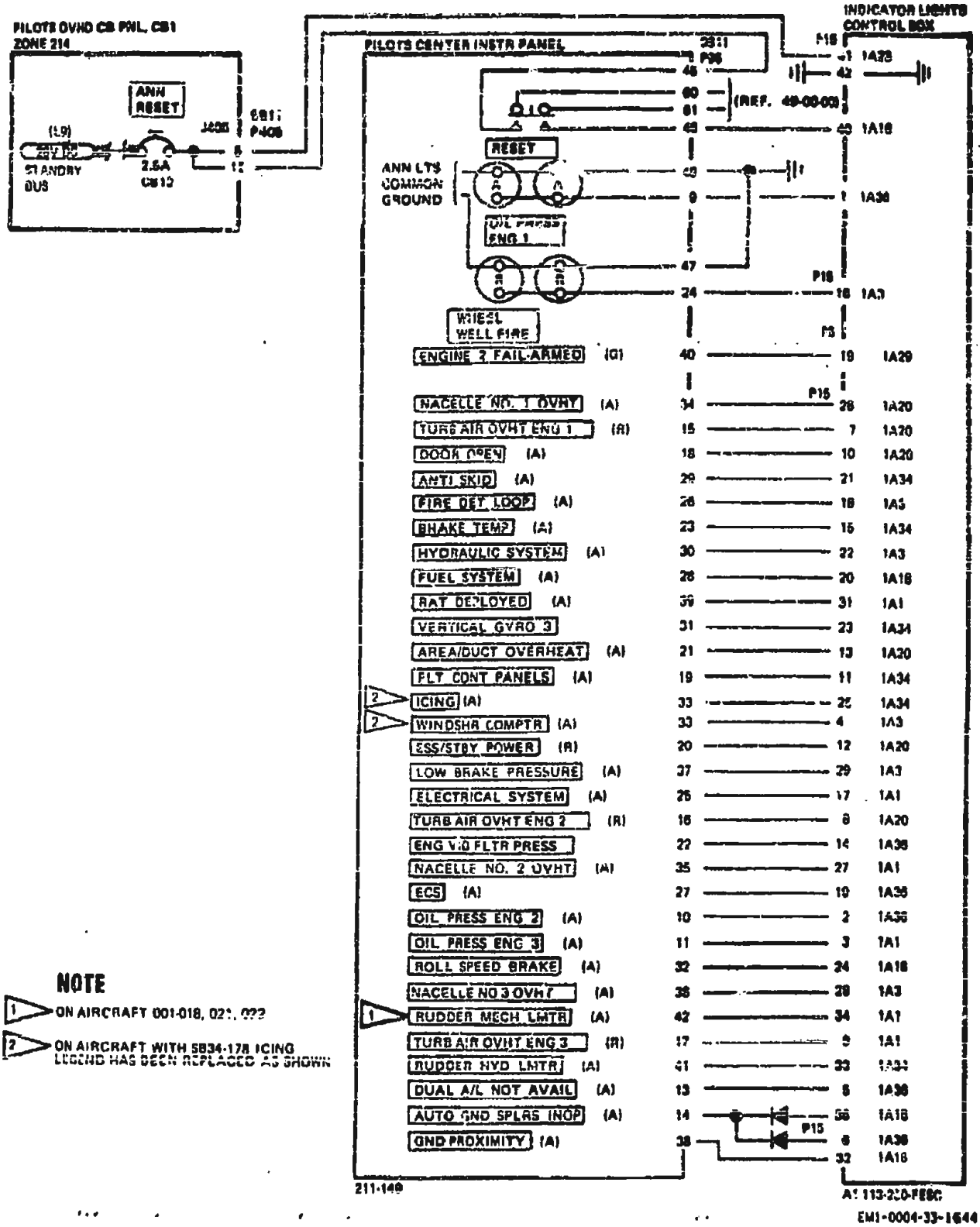
CR Pilots Caution and Warning Annunciator Lights
CR Figure 3



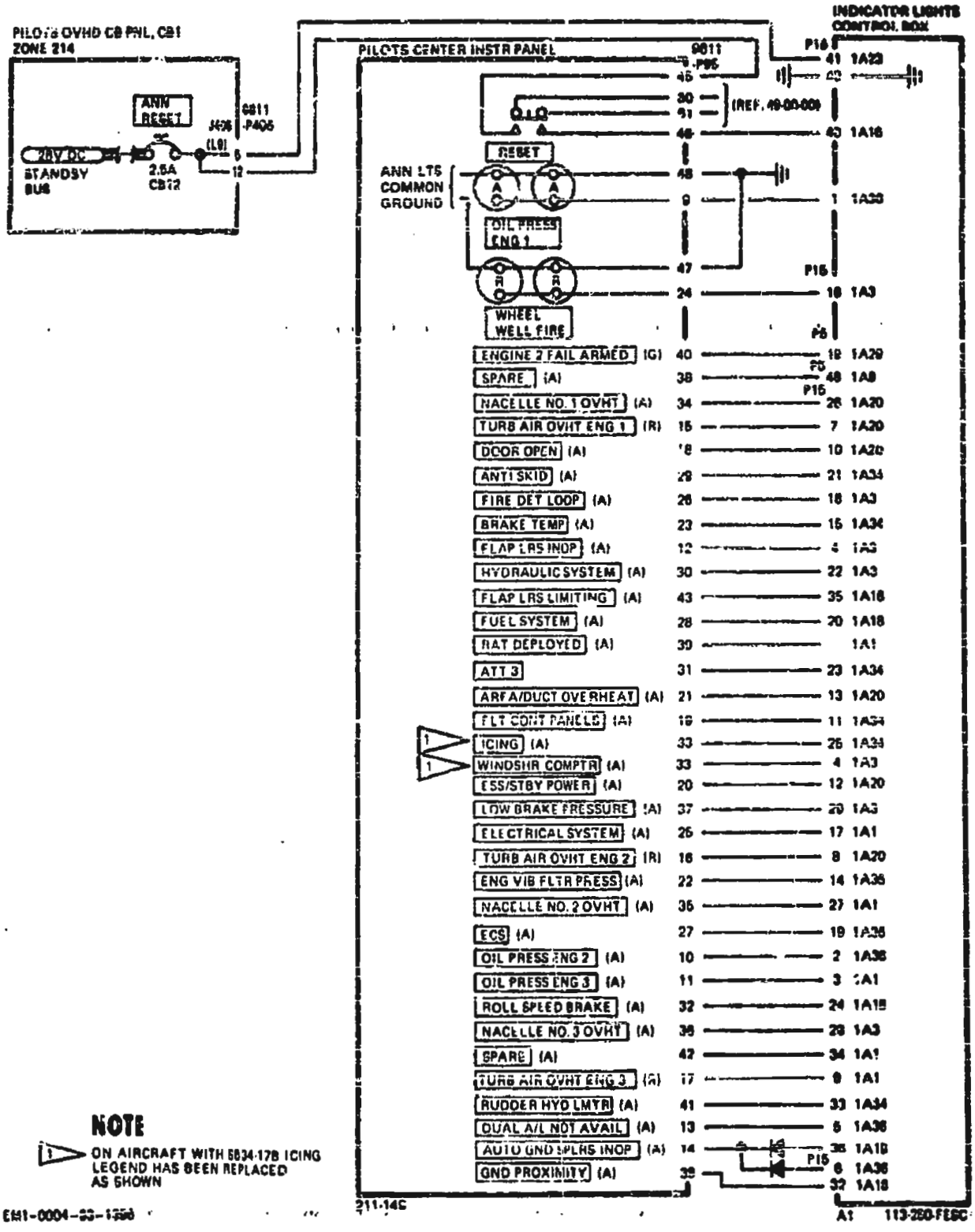
NOTE

1 ON AIRCRAFT 001-018, 021, 022

2 ON AIRCRAFT WITH SB34-178 ICING LEGEND HAS BEEN REPLACED AS SHOWN

CR
CR

Annunciator System Caution and Warning Lights Schematic
Figure 4


PILOTS OVHD CB PNL, CB1
ZONE 214
ANN RESET
28V DC
STANDBY BUS
2.5A CB12
J426
9811 P405
(L8)
PILOTS CENTER INSTR PANEL
9811 P95
ANN LTS COMMON GROUND
RESET
OIL PRESS ENG 1
WHEEL WELL FIRE
INDICATOR LIGHTS CONTROL BOX
P16
P15
P6
(REF. 49-00-00)
ENGINE 2 FAIL ARMED (G) 40 18 1A29
SPARE (A) 38 48 1A8
NACELLE NO. 1 OVHT (A) 34 26 1A20
TURB AIR OVHT ENG 1 (R) 15 7 1A20
DOOR OPEN (A) 18 10 1A20
ANTI SKID (A) 28 21 1A34
FIRE DET LOOP (A) 26 18 1A3
BRAKE TEMP (A) 23 15 1A34
FLAP LRS INOP (A) 12 4 1A3
HYDRAULIC SYSTEM (A) 30 22 1A3
FLAP LRS LIMITING (A) 43 35 1A18
FUEL SYSTEM (A) 28 20 1A18
RAT DEPLOYED (A) 39 1A1
ATT 3 31 23 1A34
AREA/DUCT OVERHEAT (A) 21 13 1A20
FLT CONT PANELS (A) 19 11 1A34
ICING (A) 33 26 1A34
WINDSHR COMPTR (A) 33 4 1A3
ESS/STBY POWER (A) 20 12 1A20
LOW BRAKE PRESSURE (A) 37 29 1A3
ELECTRICAL SYSTEM (A) 25 17 1A1
TURB AIR OVHT ENG 2 (R) 16 8 1A20
ENG VIB FLTR PRESS (A) 22 14 1A36
NACELLE NO. 2 OVHT (A) 35 27 1A1
ECS (A) 27 19 1A36
OIL PRESS ENG 2 (A) 10 2 1A36
OIL PRESS ENG 3 (A) 11 3 1A1
ROLL SPEED BRAKE (A) 32 24 1A18
NACELLE NO. 3 OVHT (A) 36 28 1A3
SPARE (A) 42 34 1A1
TURB AIR OVHT ENG 3 (A) 17 9 1A1
RUDDER HYD LMTR (A) 41 33 1A34
DUAL A/L NOT AVAIL (A) 13 5 1A36
AUTO GND SPLRS INOP (A) 14 35 1A18
GND PROXIMITY (A) 39 6 1A36
32 1A18
NOTE
1 ON AIRCRAFT WITH 5834-178 ICING LEGEND HAS BEEN REPLACED AS SHOWN
EM1-0004-33-1358
211-14C
A1 113-260-FESC

CR Annunciator System Caution and Warning Lights Schematic
CR Figure 4A

A dimming oscillator, mounted on the card, provides dimming for the MCD and all HCD cards. The oscillator receives power (+15V dc) from Power Supply No. 1 card 1A16 (Ref. Para. 7A1).

B. Operation (Ref. Para. 5B)

7. Power Supplies No. 1 and No. 2

A. General

Power Supplies No. 1 and No. 2 supply power required for logic operations and testing functions of all light driver cards. They do not provide power to turn on annunciator lighting.

(1) Power Supply No. 1 contains a flasher oscillator, dimming oscillator, and 15V dc power supply.

The 15V dc power supply provides power for operation of dimming oscillators and LEDS on all high current, medium current, and individual light driver cards. The flasher and dimming oscillators on Power Supply No. 1 receive power from the 15V dc output of Power Supply No. 2, and they control the flashing and dimming functions of all C+W cards.

(2) Power Supply No. 2 (Ref. Fig. 1) contains a 15V dc power supply and logic level converter.

The 15V dc power supply provides power for all C+W cards, Power Supply No. 1, and the 5V dc power supply.

The 5V dc power supply provides power to the logic level converter.

The normal output of the logic level converter is +5V dc which is applied to all C+W cards as a NOT RESET signal. This signal allows the C+W driver circuit to turn on when a system input is present. If the pilots C/W ANN RESET or ILCB test panel RESET switches are closed, a +28V dc input signal changes the logic level converter output to a -10V dc pulse. This pulsed output is applied to all C+W cards to inhibit the C+W light drivers and turn off the C+W lights.

8. Annunciator Lights Bright, Dim, and Test System

A. General

The annunciator lights bright, dim, and test system consists of the following:

(1) Two LIGHTS control panels (pilots and FE/SO)

(2) Nine test relays.

Both pilot and FE/SO LIGHTS control panels contain TEST and BRT/DIM switchlights. The pilots TEST switchlight and four test relays in the FESC (Zone 113) allow testing of pilots annunciator lighting. The FE/SO TEST switchlight and five test relays in the FESC (Zone 113) allow testing of the FE/SO annunciator lighting.

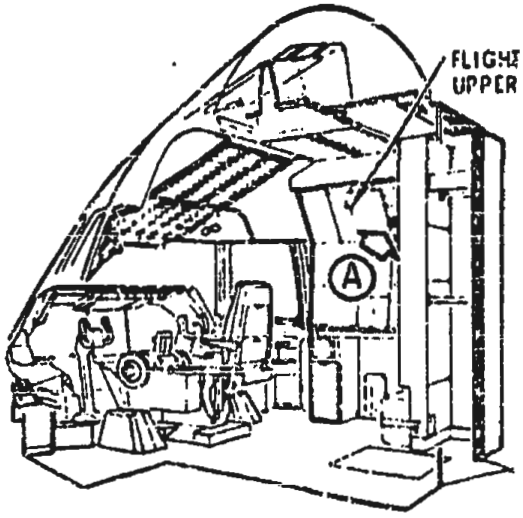
The BRT/DIM switchlights allow annunciator lighting to function in the BRIGHT or DIM mode.

B. Operation

Depressing TEST switchlights provides 28V dc to holding coils on test relays and activates a 5 minute timer (Ref. Fig. 6 and 7) Test relays provide either +28V dc inputs for positive switched light driver circuits or ground inputs for ground switched light driver circuits. These inputs bypass system switches or sensors to turn on asscciated system indicator lights. The test can be turned off at any time by depressing the switchlight. After 5 minutes the timer will deenergize the test relay holding coils and terminate the test.

Setting the BRT/DIM switchlights to bright inhibits oscillator outputs to all light driver circuits allowing annunciator lighting to function in the BRIGHT mode. When Thunderstorm Relay No. 3 (Ref 33-10-00) is energized the operation of both pilot and FE/SO BRT/DIM switchlights is bypassed and annunciator lighting functions in the BRIGHT mode.

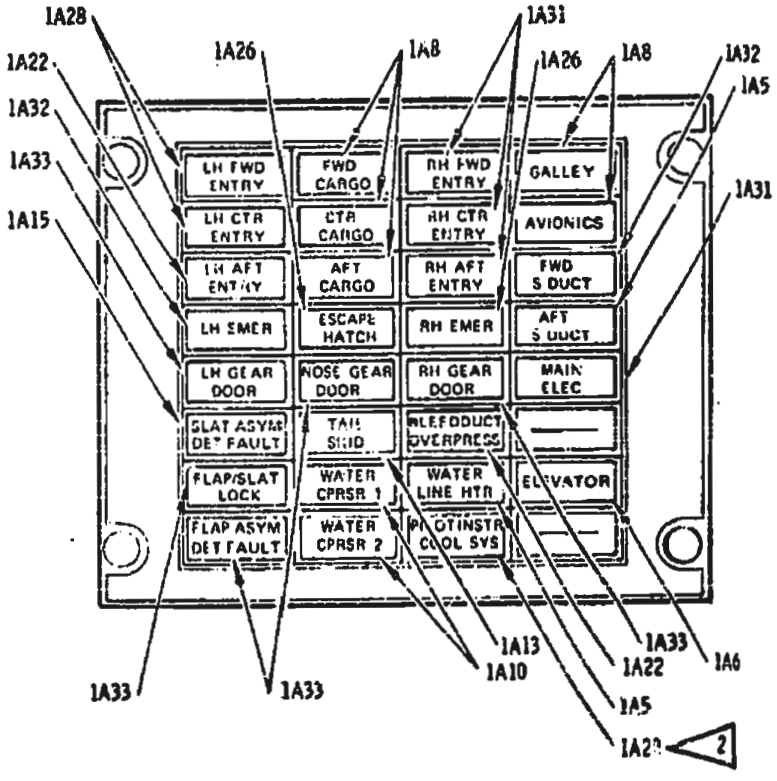
The indicator lights at the FE/SO annunciator panel (Ref. Fig. 5), and their associated instruments and controls throughout the flight station have no flashing capability. These indicator lights come on either bright or dim when provided with a signal by the light drivers in the ILCB.



NOTE

1 LEADER LINES AND NUMBERS IDENTIFY ILCB CARD THAT CONTROLS EACH INDICATOR

2 ON AIRCRAFT 032-999



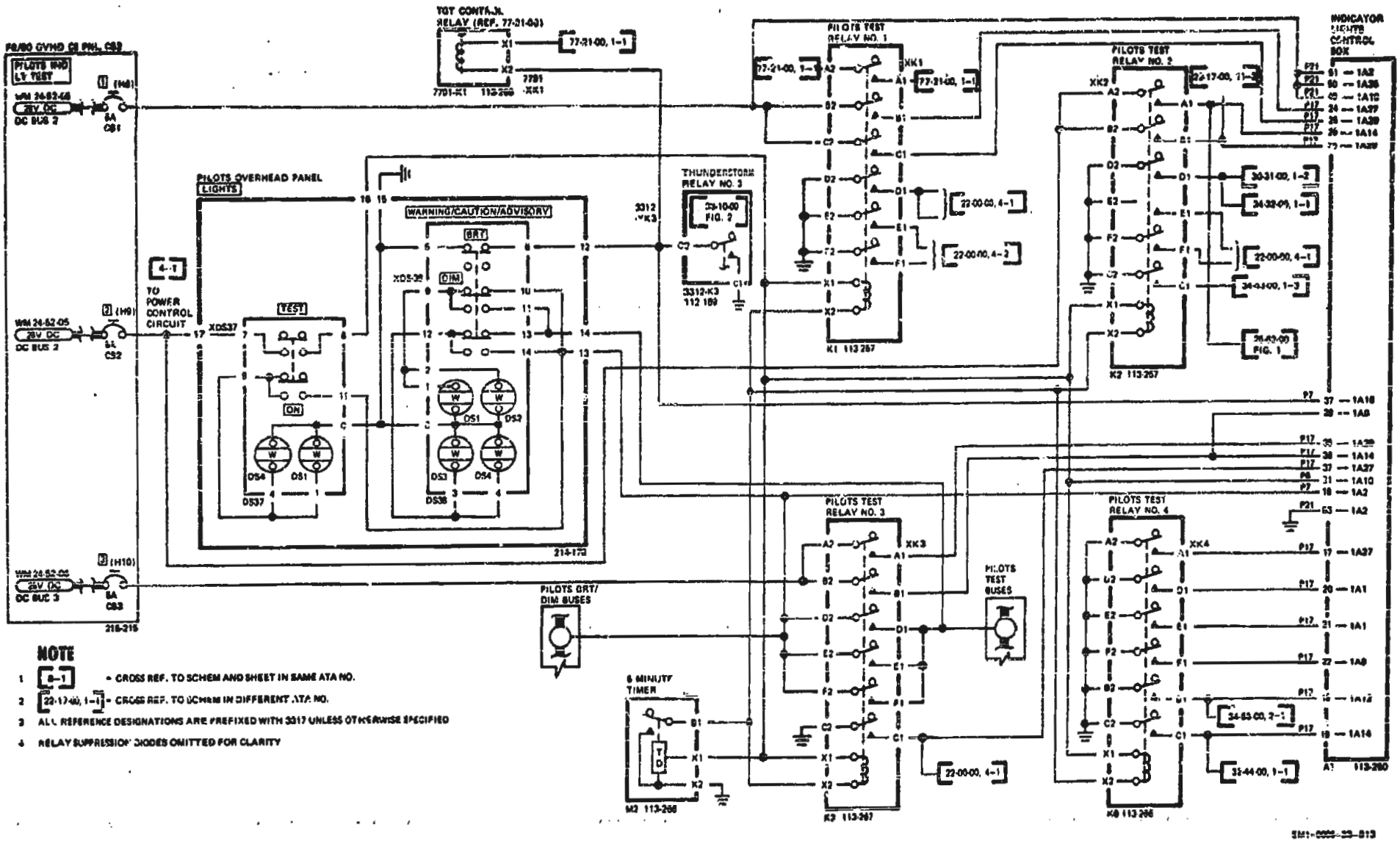
M1-0001-33-1819

R
R

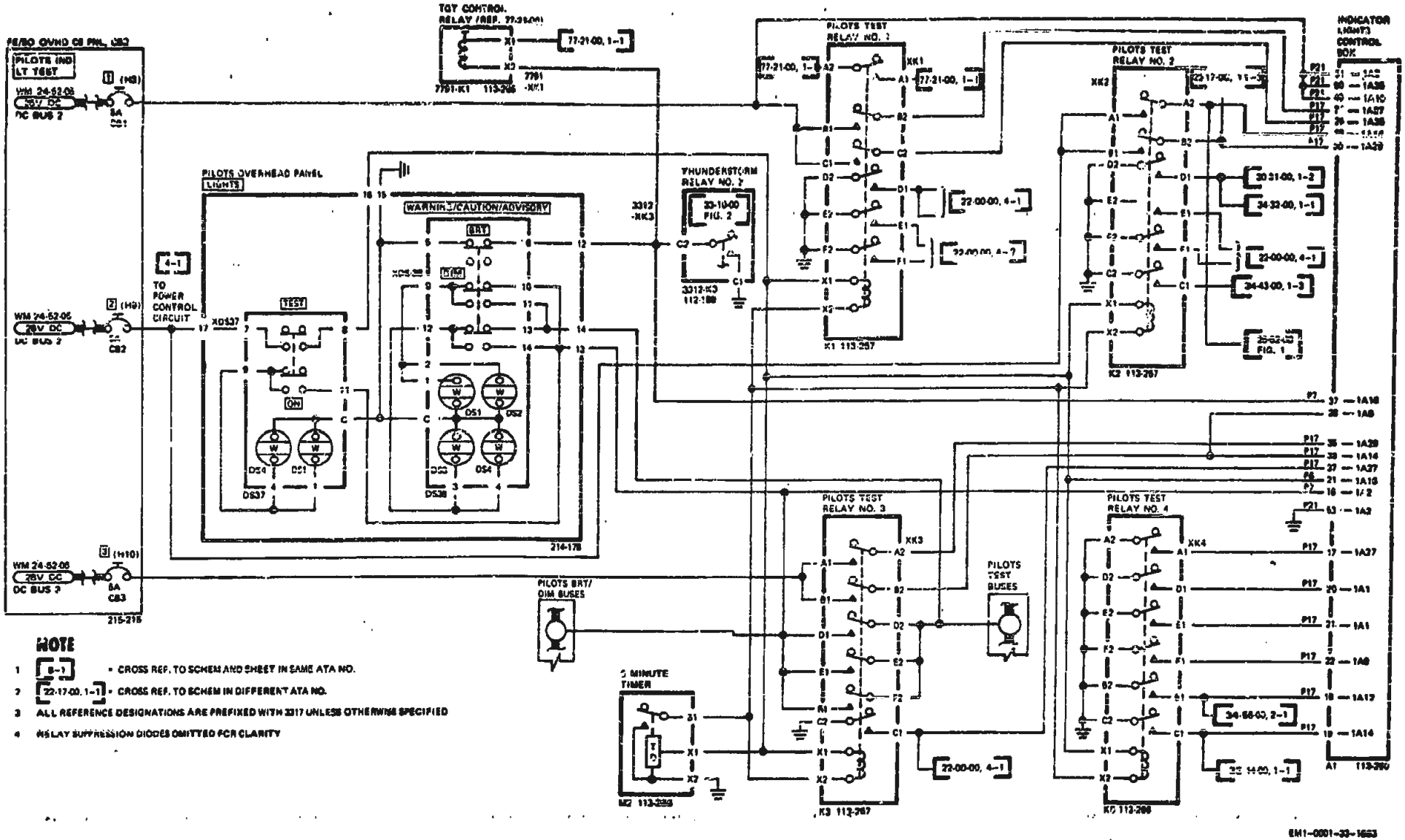
FE/SO Annunciator Panel
Figure 5

EFFECTIVITY: ALL

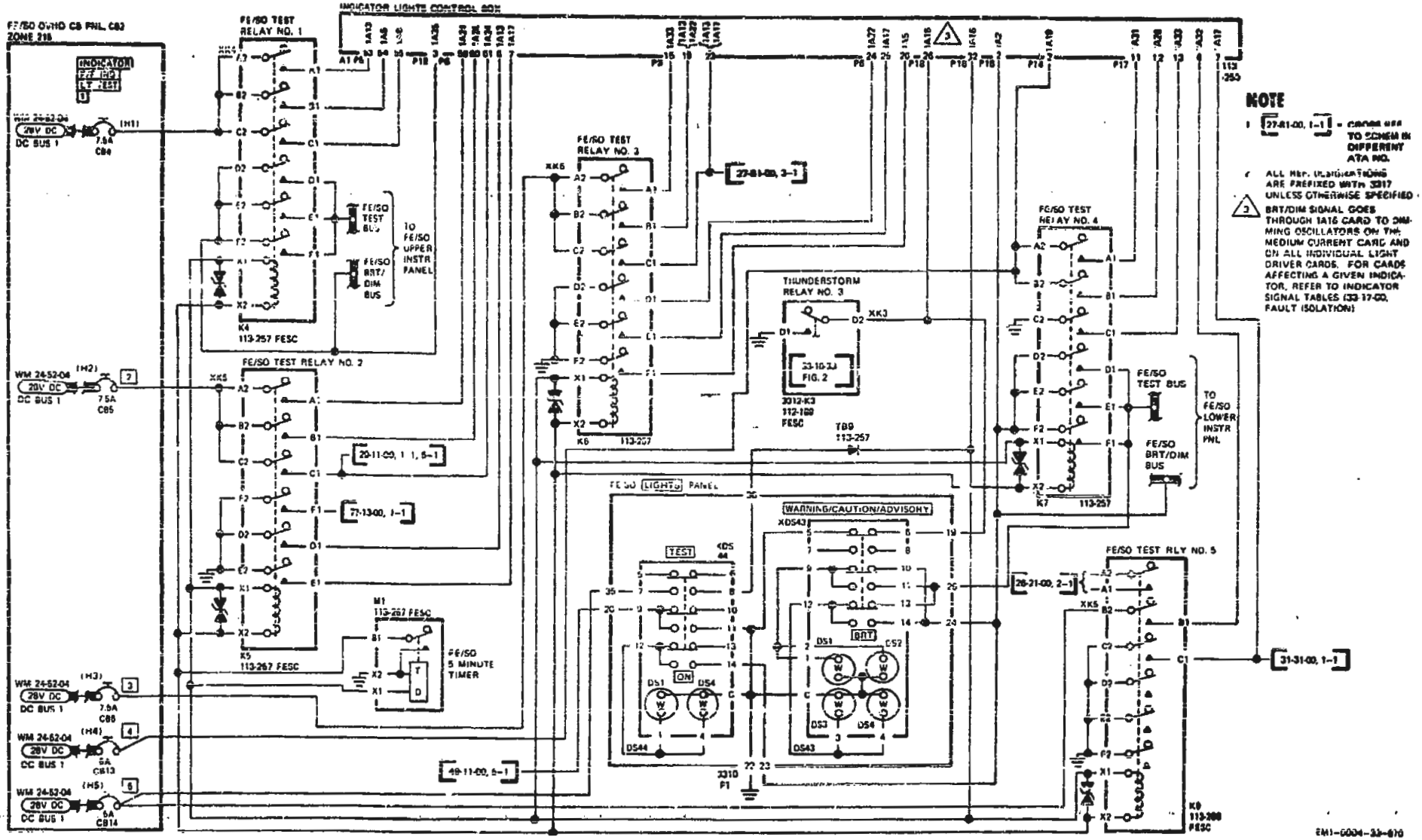
001B


PILOTS OVERHEAD PANEL LIGHTS
WARNING/CAUTION/ADVISORY
PILOTS TEST RELAY NO. 1
PILOTS TEST RELAY NO. 2
PILOTS TEST RELAY NO. 3
PILOTS TEST RELAY NO. 4
THUNDERSTORM RELAY NO. 3
TGT CONTA.M. RELAY (REF. 77-21-03)
INDICATOR LIGHTS CONTROL BOX
PILOTS GRT/DIM BUSES
PILOTS TEST BUSES
6 MINUTE TIMER
TO POWER CONTROL CIRCUIT
PILOTS WHD LT TEST
TEST
DIM
GRT
ON
DC BUS 2
DC BUS 3
28V DC
NOTE
1 = CROSS REF. TO SCHEM AND SHEET IN SAME ATA NO.
2 = CROSS REF. TO SCHEM IN DIFFERENT ATA NO.
3 ALL REFERENCE DESIGNATIONS ARE PREFIXED WITH 3317 UNLESS OTHERWISE SPECIFIED
4 RELAY SUPPRESSION DIODES OMITTED FOR CLARITY

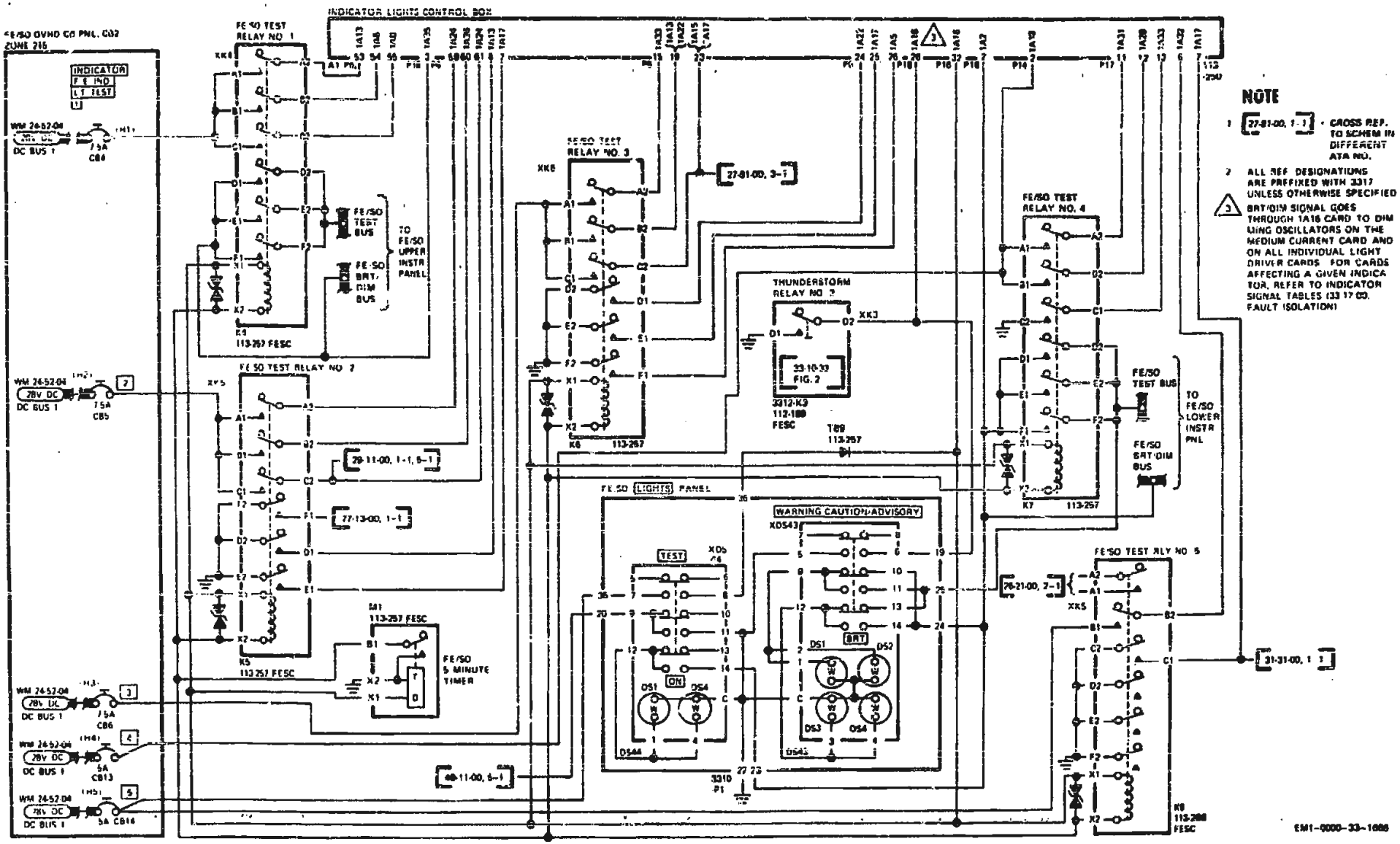
Pilots Bright/Dim and Test Schematic
Figure 6



R Pilots Bright/Dim and Test Schematic
R Figure 6

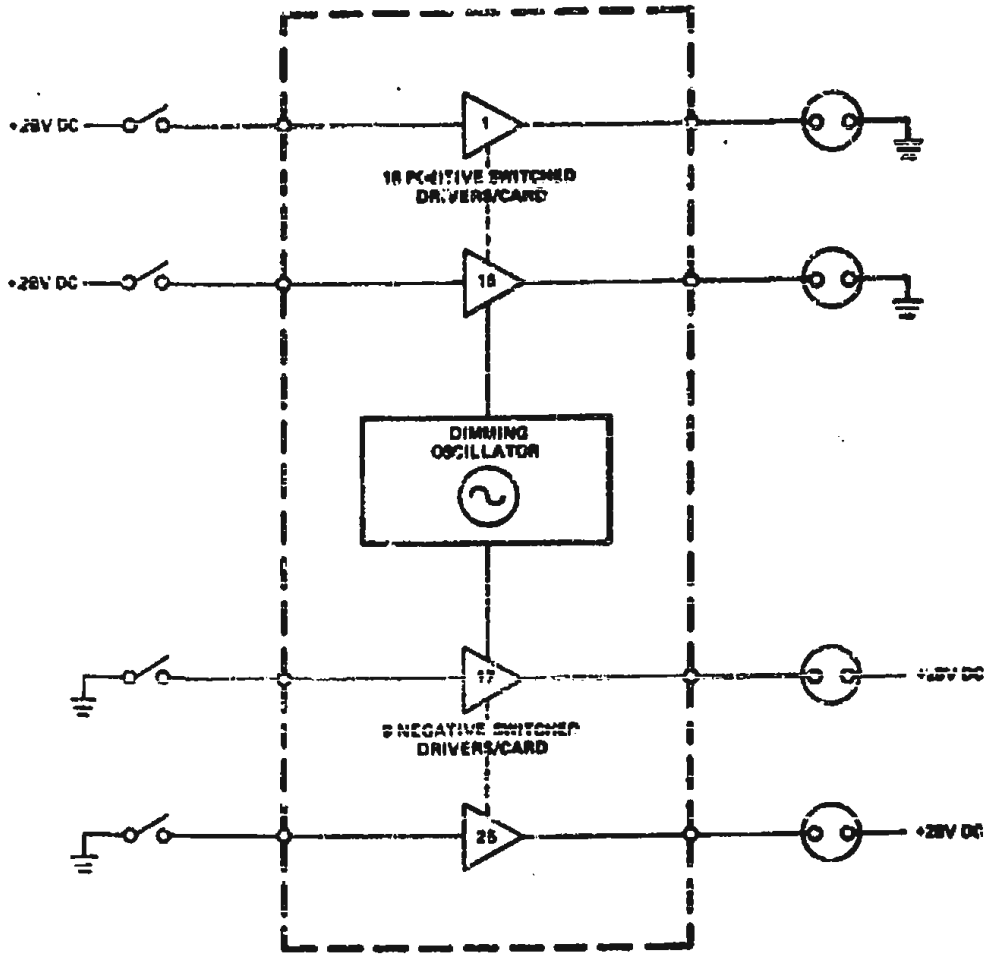

INDICATOR LIGHTS CONTROL BOX
FE/SO OVHD CB PNL C82
ZONE 218
FE/SO TEST RELAY NO. 1
FE/SO TEST RELAY NO. 2
FE/SO TEST RELAY NO. 3
FE/SO TEST RELAY NO. 4
FE/SO TEST RLY NO. 5
THUNDERSTORM RELAY NO. 3
FE/SO TEST BUS
FE/SO BRT/DIM BUS
TO FE/SO UPPER INSTR PANEL
TO FE/SO LOWER INSTR PNL
FE/SO 5 MINUTE TIMER
FE/SO LIGHTS PANEL
WARNING/CAUTION/ADVISORY
TEST
ON
BRT
DC BUS 1
28V DC
7.5A C84
7.5A C85
7.5A C86
5A CB13
5A CB14
K4 113-257 FESC
K5 113-257 FESC
K6 113-257
K7 113-257
K8 113-288 FESC
M1 113-257 FESC
T89 113-257
3312-K3 112-100 FESC
3310 P1
NOTE
1 27-61-00, 1-1 - CROSS REF TO SCHEM IN DIFFERENT ATA NO.
2 ALL REF. DESIGNATIONS ARE PREFIXED WITH 3317 UNLESS OTHERWISE SPECIFIED
3 BRT/DIM SIGNAL GOES THROUGH 1A16 CARD TO DIMMING OSCILLATORS ON THE MEDIUM CURRENT CARD AND ON ALL INDIVIDUAL LIGHT DRIVER CARDS. FOR CARDS AFFECTING A GIVEN INDICATOR, REFER TO INDICATOR SIGNAL TABLES (33-17-00, FAULT ISOLATION)
EM1-0004-33-010

R FE/SO Bright/Dim and Test Schematic
R Figure 7

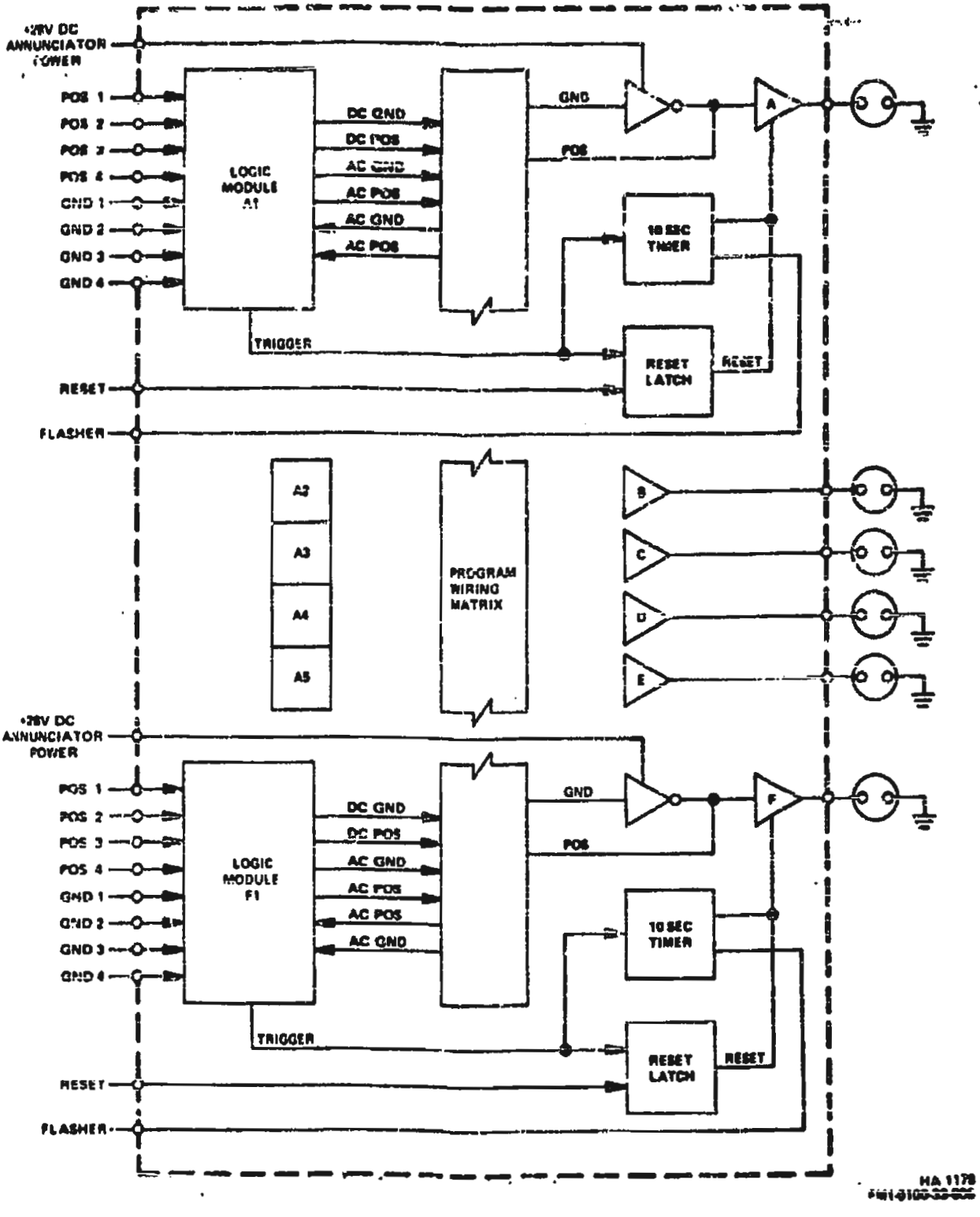

INDICATOR LIGHTS CONTROL BOX
FE/SO OVHD CO PNL, C02
ZONE 215
INDICATOR
F E IND
LT TEST
FE/SO TEST RELAY NO. 1
FE/SO TEST RELAY NO. 2
FE/SO TEST RELAY NO. 3
FE/SO TEST RELAY NO. 4
FE/SO TEST RLY NO. 5
THUNDERSTORM RELAY NO. 2
FE/SO TEST BUS
FE/SO BRT/DIM BUS
TO FE/SO UPPER INSTR PANEL
TO FE/SO LOWER INSTR PNL
FE/SO 5 MINUTE TIMER
FE/SO LIGHTS PANEL
WARNING CAUTION/ADVISORY
TEST
ON
BRT
DC BUS 1
28V DC
7.5A CB4
7.5A CB5
7.5A CB6
5A CB13
5A CB14
27-81-00, 3-1
29-11-00, 1-1, 6-1
27-13-00, 1-1
26-21-00, 2-1
31-31-00, 1-1
NOTE
1 27-81-00, 1-1 - CROSS REF. TO SCHEM IN DIFFERENT ATA NO.
2 ALL REF DESIGNATIONS ARE PREFIXED WITH 3317 UNLESS OTHERWISE SPECIFIED
3 BRT/DIM SIGNAL GOES THROUGH 1A16 CARD TO DIM USING OSCILLATORS ON THE MEDIUM CURRENT CARD AND ON ALL INDIVIDUAL LIGHT DRIVER CARDS. FOR CARDS AFFECTING A GIVEN INDICATOR, REFER TO INDICATOR SIGNAL TABLES (33-17-00, FAULT ISOLATION)
EM1-0000-33-1000

FE/SO Bright/Dim and Test Schematic
Figure 7

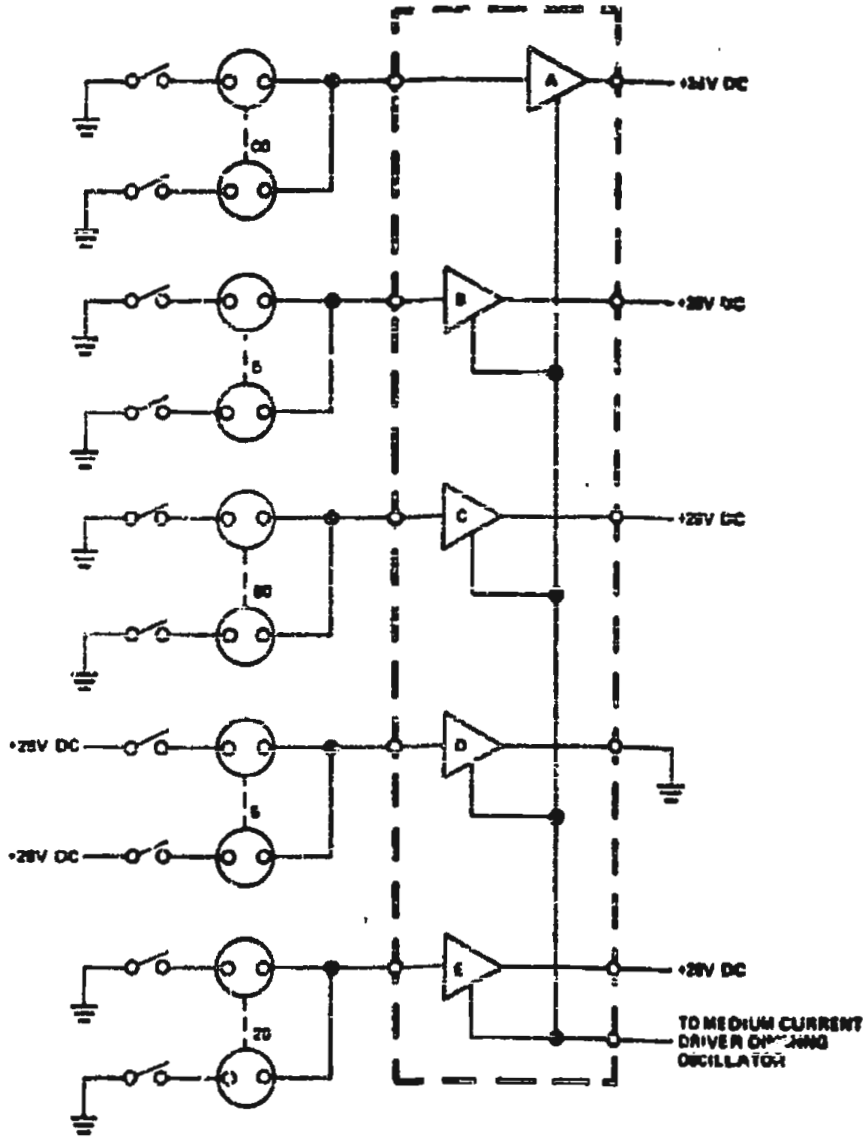
EFFECTIVITY: 033-999



Individual Light Driver Functional Schematic
Figure 8

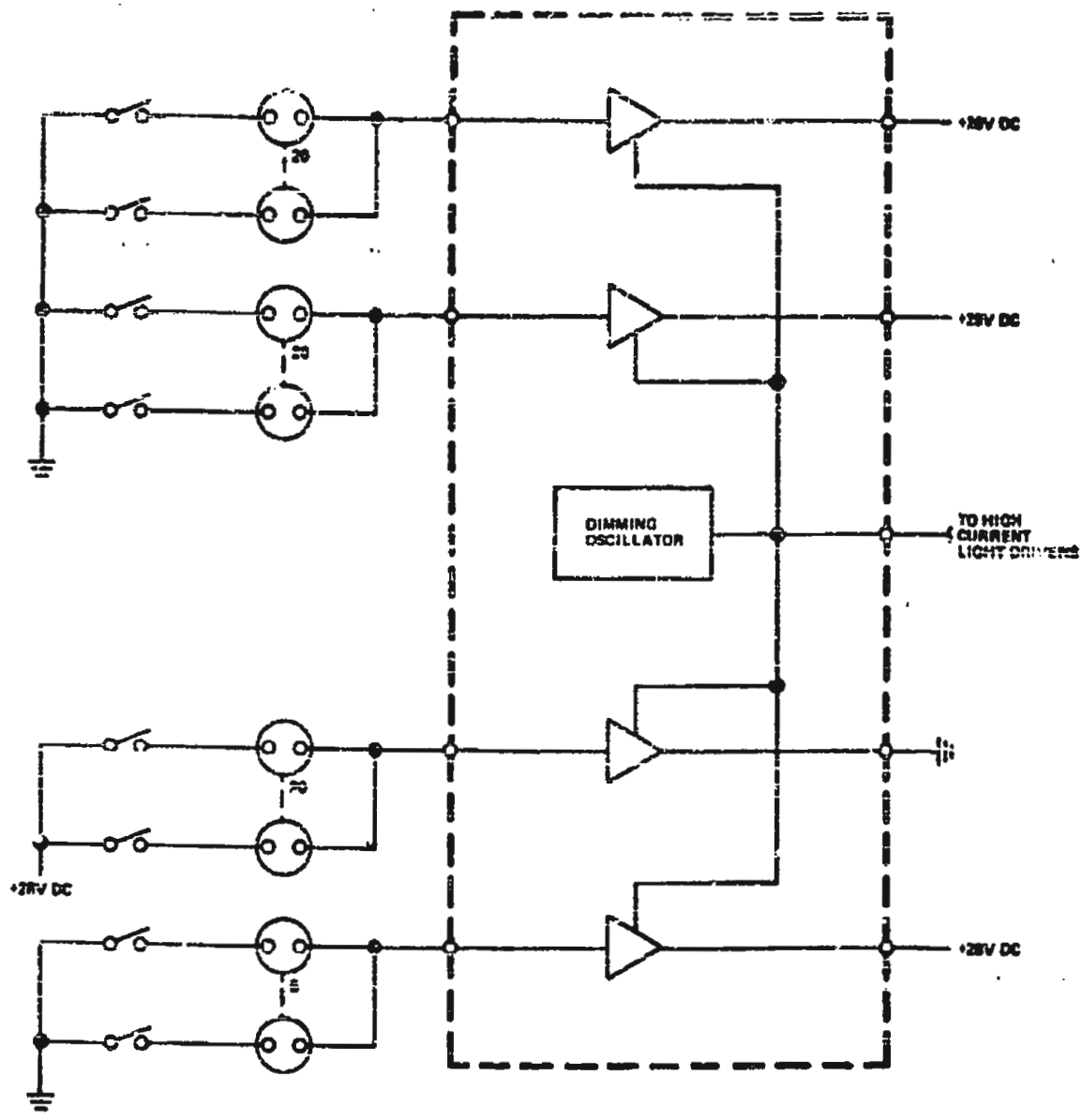


Caution and Warning Light Driver Functional Schematic
Figure 9



HA 1180

High Current Multiple Light Driver Functional Schematic
Figure 10



HA 1232
EM140100-33-008

Medium Current Multiple Light Driver Functional Schematic
Figure 11

ANNUNCIATOR SYSTEM - FAULT ISOLATION

1. General

Reference data and fault isolation procedures for troubleshooting system faults are included in this section of the manual. A system malfunction detected by the flight crew is normally entered in the aircraft flight log book and reported to the maintenance personnel by a FIRM fault code number. This number and the flight log book write-up can be found in the Fault Code Index. The index specifies the maintenance manual section, fault isolation diagram figure number, and where appropriate, a block number indicating the diagram entry point containing the fault isolation procedure. When no block number is specified, the diagram entry point is Block 1.

Prerequisites listed at the top of each diagram identify mandatory preliminary steps and circuit breakers that must be closed before initiating any fault isolation step.

Schematic diagrams, identified by a SCHEM number, supplement fault isolation procedures as maintenance aids. The schematics show the basic system circuitry necessary for troubleshooting and include cross-reference indexes to the wiring diagram manual pages required for checking component interconnect wiring.

2. Fault Isolation/Identification

Annunciator system fault isolation involves the use of BITE to identify faulty circuit cards in the indicator lights control box and to check for input or output signals at the indicator lights control box connectors (Ref. 33-17-00). If a faulty circuit card is detected during the BITE check, replace the card and repeat the check (Ref. 33-17-04).

R NOTE: If an annunciator light is on when it should not be, performing a card test on the associated card will be invalid since the card will, in most cases, pass the test. However, the card should be replaced since the channel driving the annunciator lamp may have a shorted driver (Ref. TABLE 101, Figure 107 THRU 127). If the light remains after card replacement, troubleshooting the associated system is necessary. The Individual Light Driver Cards (Reference Designators 1A5 through 1A10, 1A12 through 1A15, 1A17, 1A22, 1A24, 1A26 through 1A29, and 1A31 through 1A33) are interchangeable. The High Current Driver Cards (Reference Designators 1A2, 1A19 and 1A35) are also interchangeable. The Caution and Warning Cards, Medium Current Driver Card and Power Supply Cards

are not interchangeable.

Card Reference Designators are 1A1 through 1A36 with 1A1 at the top of the box as it is mounted in the aircraft and card 1A36 at the bottom.

Table 101 is a list of fault isolation data in this section of the manual.

Indicator Signal Diagrams
Table 101

FIGURE	TITLE
101	Component Location Index
102	Component Locator Diagram
103	Indicator Lights Test Fault Isolation
104	Indicator Lights BRT/DIM Control Fault Isolation
105	Caution and Warning FE/SO Lights Test/Reset Fault Isolation
106	Caution and Warning Panel Fault Isolation
107	Indicator Data Locator - Pilots Overhead Panel
108	Indicator Data Locator - FE/SO Upper Instrument Panel
109	Indicator Data Locator - FE/SO Lower Instrument Panel
110	Indicator Signals - Glareshield Panels and Pilots Center Console
111	Indicator Signals - Pilots Instrument Panels
112	Indicator Signals - Pilots Center Instrument Panel
113	Indicator Signals - PFCS Monitor, Anti-Skid, Wiper, Exterior Lights, and Compass (Captains) Panels
114	Indicator Signals - FCES, Flight Control, Engine Start, and Engine Fire Extinguisher Panels
115	Indicator Signals - Evacuation, Air Data Sensor Heat, Compass (First Officers), Windshield Heat, Wing Anti-ice, and Lights (Pilots) Panels

Indicator Signal Diagrams (Cont)
Table 101

FIGURE	TITLE
116	Indicator Signals - Engine Anti-Ice, Cabin Master Radio and Interior Light Panels
117	Indicator Signals - Fire Detection Loop Test, Fire Extinguisher Test, APU Fire Extinguisher, and Oxygen Panels
118	Indicator Signals - Hydraulic System Panel
119	Indicator Signals - Engine Bleed and Cabin Temperature Control Panel
120	Indicator Signals - Nacelle/Pylon Test, Wheel Well Fire Test, Engine Air, Cabin Pressure, and ECS Monitor Panels
121	Indicator Signals - Slat Monitor, Aural Warning Test, and Annunciator (FE/SO) Panels
122	Indicator Signals - Electrical System Panel
123	Indicator Signals - Fuel System and Lights (FE/SO) Panels
124	Indicator Signals - Engine Oil, Engine Status, Fuel, and APU Control Panels
125	Indicator Signals - Brake Temperature, Humidity Control, Waste Water, Fuel Jettison Panels
126	Indicator Signals - Captains, First Officers and FE/SO Microphone Selector Panels
127	Indicator Signals - Rated EPR Mode and Weight and Balance Panels
SCHEM 1	Pilots Bright/Dim and Test Schematic
SCHEM 2	FE/SO Bright/Dim and Test Schematic
SCHEM 3	Annunciator System Power Supply Schematic
SCHEM 4	Annunciator System Power Control Schematic
SCHEM 5	Annunciator System Caution and Warning Lights Schematic
SCHEM 6	Indicator Bright/Dim and Test - Card 1A2 Schematic

Indicator Signal Diagrams (Cont)
Table 101

FIGURE	TITLE
SCHEM 7	Indicator Bright/Dim and Test - Card 1A19 Schematic
SCHEM 8	Indicator Bright/Dim and Test - Card 1A30 Schematic
SCHEM 9	Indicator Bright/Dim and Test - Card 1A35 Schematic

3. Indicator Lights Control Box BITE Check

NOTE: If an annunciator light is on when it should not be, performing a card test on the associated card will be invalid because the card will, in most cases, pass the test. However, the card should be replaced because the channel driving the annunciator lamp may have a shorted driver. If the light remains on after card replacement, troubleshooting of the associated system is necessary.

A. If a faulty circuit card is detected during the BITE check, replace the card and repeat the check (Ref. 33-17-04).

(1) Turn on electrical power (Ref. 24-41-00).

(2) On the pilots overhead circuit breaker panel CB2, zone 210, verify that circuit breaker ANN RESET (L9) is closed.

(3) In FESC, open cover on indicator lights control box, zone 113.

(4) Hold TEST/TEST BITE switch in TEST BITE position. All BITE indicator light emitting diodes should come on and emit light continuously.

NOTE: The number of light emitting diodes per card may vary.

(5) Release TEST/TEST BITE switch. All BITE indicators should go out.

(6) Hold TEST/TEST BITE switch in TEST position and BRT/DIM switch in BRT position. BITE indicator light emitting diodes should operate as shown in Table 102.

(7) While holding switches in the positions indicated in Step (6), depress RESET switch momentarily. The BITE

indicators on cards 1A1, 1A3, 1A18, 1A20, 1A34 and 1A36 should come on continuously.

(8) Release all switches.

(9) Close and latch cover on indicator lights control box.

(10) Turn off electrical power (Ref. 24-41-00).

BITE Indicator Status
Table 102

CIRCUIT CARD	REF. DES.	BITE INDICATOR STATUS
Caution and Warning	1A1, 1A3, 1A18, 1A20, 1A34, 1A36	Flashing for 10 seconds, then off
Light Driver	1A5, 1A6, 1A7, 1A8, 1A9, 1A10, 1A12, 1A13, 1A14, 1A15, 1A17, 1A22, 1A24, 1A26, 1A27, 1A28, 1A29, 1A31, 1A32, 1A33	Off
High Current Driver	1A2, 1A19, 1A35	Off - BITE does not monitor medium current card dimming oscillator output drivers; BITE on all 3 high current cards can indicate failure without actual high current card failure. The cause can be failure of medium current card dimming oscillator output driver even if medium current card BITE indicates no failure.
Medium Current	1A30	Off
Power Supply No. 1	1A16	Left - Flashing Right - On Continuously
Power Supply No. 2	1A23	Both - On Continuously

R 4. INDICATOR LIGHTS TEST - FLIGHT STATION

R A. On Pilots panel all indicators will come on except: AFCS
R WARNING ALERT, FIRE WARNING, MARKER BEACON, TERRAIN
R INDICATORS; LE SLAT TRANSIT LIGHT (except when slats are
R extended 1.5 degrees).

R (1) All indicators will dim except: EVAC indicator.

R B. On FE/SO panel all indicators will come on except: AFCS
R WARNING ALERT, FIRE DETECTION LOOP TEST PNL and WHEEL WELL
R FIRE TEST PNL.

COMPONENT	QTY	AREA/ACCESS	REFERENCE
CIRCUIT BREAKERS:			
ANN RESET, 3317-CB12	1	1L9	20-24-05
EPR, 7713-CB2	1	2H9	20-24-05
F/E IND LT TEST 1, 3317-CB4	1	2H1	20-24-05
F/E IND LT TEST 2, 3317-CB5	1	2H2	20-24-05
F/E IND LT TEST 3, 3317-CB6	1	2H3	20-24-05
F/E IND LT TEST 4, 3317-CB13	1	2H4	20-24-05
F/E IND LT TEST 4, 3317-CB14	1	2H5	20-24-05
IND LT AC BUS, 3317-CB7	1	3G11	20-24-05
IND LT F/E PANEL LOWER, 3317-CB9	1	2J4	20-24-05
IND LT F/E PANEL UPPER, 3317-CB8	1	2J3	20-24-05
IND LT FLT CONT ALT ALERT, 3317-CB11	1	3G9	20-24-05
IND LT PFCS AOB/DH, 3317-CB10	1	3G8	20-24-05
IND LT PILOTS, 3317-CB7	1	2J2	20-24-05
IND LT – RAT, 2921-CB21	1	3G10	20-24-05
PILOTS IND LT TEST 1, 3317-CB1	1	2H8	20-24-05
PILOTS IND LT TEST 2, 3317-CB2	1	2H9	20-24-05
PILOTS IND LT TEST 3, 3317-CB3	1	2H10	20-24-05
CONTROL BOX – INDICATOR LIGHTS, 3317-A1	1	FESC, AFT RH SIDE* FS245	33-17-04
LAMPS:			
F/E BRT/DIM, 3317-DS43	4	FE/SO PNL/P13	20-33-01
PILOTS BRT/DIM, 3317-DS34	4	PILOTS OVHD PNL/P5	20-33-01
F/E LIGHTS TEST, 3317-DS44	2	FE/SO PNL/P13	20-33-01
CAPTS LIGHTS TEST, 3317-DS37	2	PILOTS OVHD PNL/P5	20-33-01
THUNDERSTORM, 3312-DS1	2	PILOTS OVHD PNL/P5	20-33-01
RELAYS:			
CAPT ANNUN LIGHTS TEST NO. 1, 3317-K1	1	FESC, RELAY PNL, RH SIDE/ FS 250-266	20-24-01
CAPT ANNUN LIGHTS TEST NO. 2, 3317-K2	1	FESC, RELAY PNL, RH SIDE/ FS 250-266	20-24-01
CAPT ANNUN LIGHTS TEST NO. 3, 3317-K3	1	FESC, RELAY PNL, RH SIDE/ FS 250-266	20-24-01
CAPT ANNUN LIGHTS TEST NO. 4, 3317-K8	1	FESC, RELAY PNL, RH SIDE/ FS 250-266	20-24-01
FE/SO ANNUN LIGHTS TEST NO. 1, 3317-K4	1	FESC, RELAY PNL, RH SIDE/ FS 250-266	20-24-01
FE/SO ANNUN LIGHTS TEST NO. 2, 3317-K5	1	FESC, RELAY PNL, RH SIDE/ FS 250-266	20-24-01
FE/SO ANNUN LIGHTS TEST NO. 3, 3317-K6	1	FESC, RELAY PNL, RH SIDE/ FS 250-266	20-24-01
FE/SO ANNUN LIGHTS TEST NO. 4, 3317-K7	1	FESC, RELAY PNL, RH SIDE/ FS 250-266	20-24-01
FE/SO ANNUN LIGHTS TEST NO. 5, 3317-K9	1	FESC, RELAY PNL, RH SIDE/ FS 250-266	20-24-01

*SEE WM EQUIPMENT LIST

M1-0000-33-169

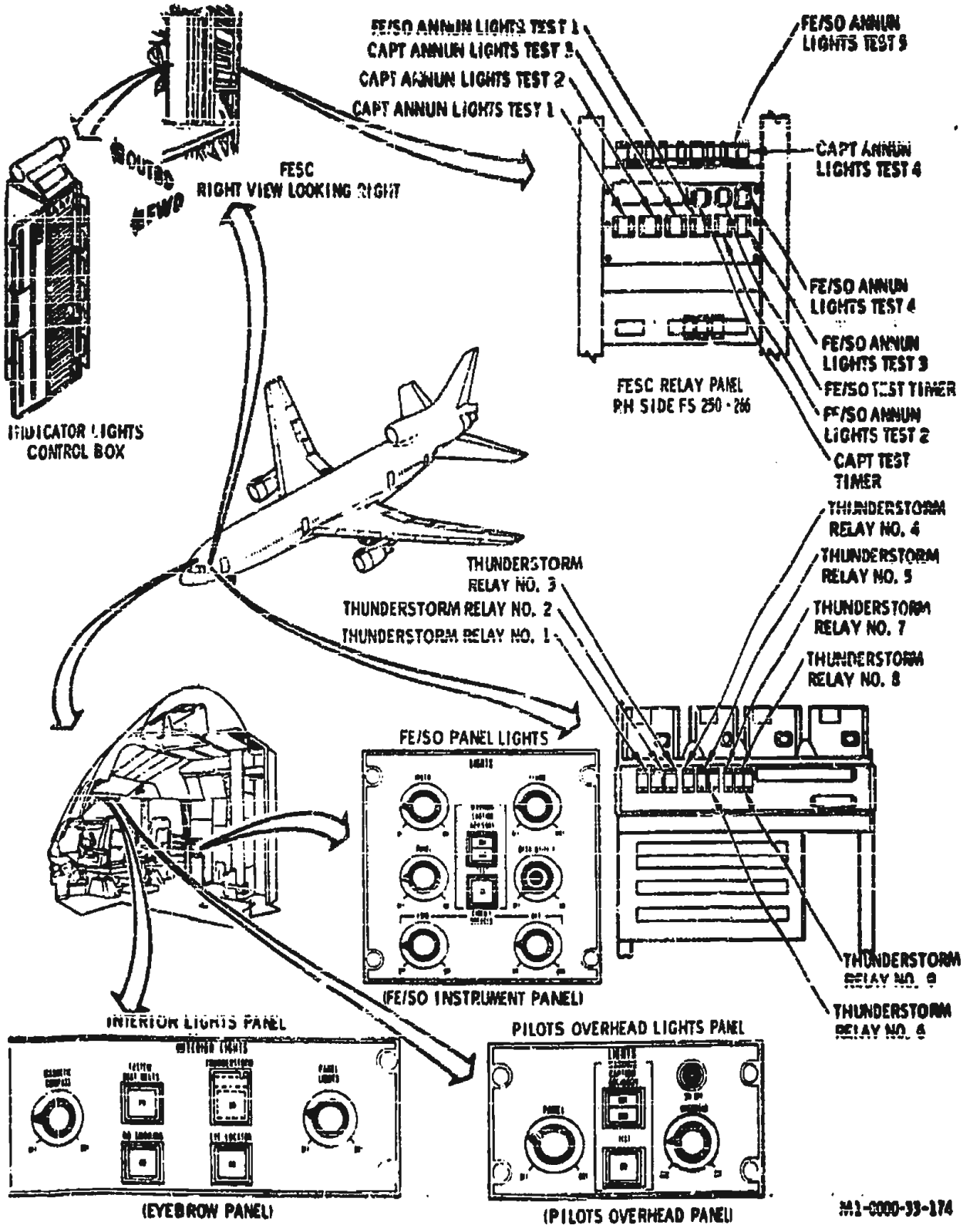
Component Location Index
Figure 101 (Sheet 1)

COMPONENT	QTY	AREA/ACCESS	REFERENCE
RELAYS (CONT'D):			
THUNDERSTORM NO. 1, 3312-K1	1	FESC FWD SIDE OF ELEC RACK	20-24-01
THUNDERSTORM NO. 2, 3312-K2	1	FESC FWD SIDE OF ELEC RACK	20-24-01
THUNDERSTORM NO. 3, 3312-K3	1	FESC FWD SIDE OF ELEC RACK	20-24-01
THUNDERSTORM NO. 4, 3312-K4	1	FESC FWD SIDE OF ELEC RACK	20-24-01
THUNDERSTORM NO. 5, 3312-K5	1	FESC FWD SIDE OF ELEC RACK	20-24-01
THUNDERSTORM NO. 6, 3312-K6	1	FESC FWD SIDE OF ELEC RACK	20-24-01
THUNDERSTORM NO. 7, 3312-K7	1	FESC FWD SIDE OF ELEC RACK	20-24-01
THUNDERSTORM NO. 8, 3312-K8	1	FESC FWD SIDE OF ELEC RACK	20-24-01
THUNDERSTORM NO. 9, 3312-K9	1	FESC FWD SIDE OF ELEC RACK	20-24-01
SWITCH – RESET, 3317-S1	1	CTR INSTRUMENT PNL/P2	*
SWITCHLIGHTS:			
F/E BRT/DIM, 3317-DS43	1	FE/SO PNL/P13	20-33-01
CAPT BRT/DIM, 3317-DS38	1	PILOTS OVHD PNL/P5	20-33-01
F/E LIGHTS TEST, 3317-DS44	1	FE/SO PNL/P13	20-33-01
CAPT LIGHTS TEST, 3317-DS37	1	PILOTS OVHD PNL/P5	20-33-01
THUNDERSTORM, 3312-DS1	1	PILOTS OVHD PNL/P5	20-33-01
TIMER:			
CAPT'S ANNUN LIGHTS TEST, 3317-M2	1	FESC RELAY PNL, RH SIDE/ FS 250-266	*
FE/SO ANNUN LIGHTS TEST, 3317-M1	1	FESC RELAY PNL, RH SIDE/ FS 250-266	*

*SEE WM EQUIPMENT LIST

M1-0000-33-134

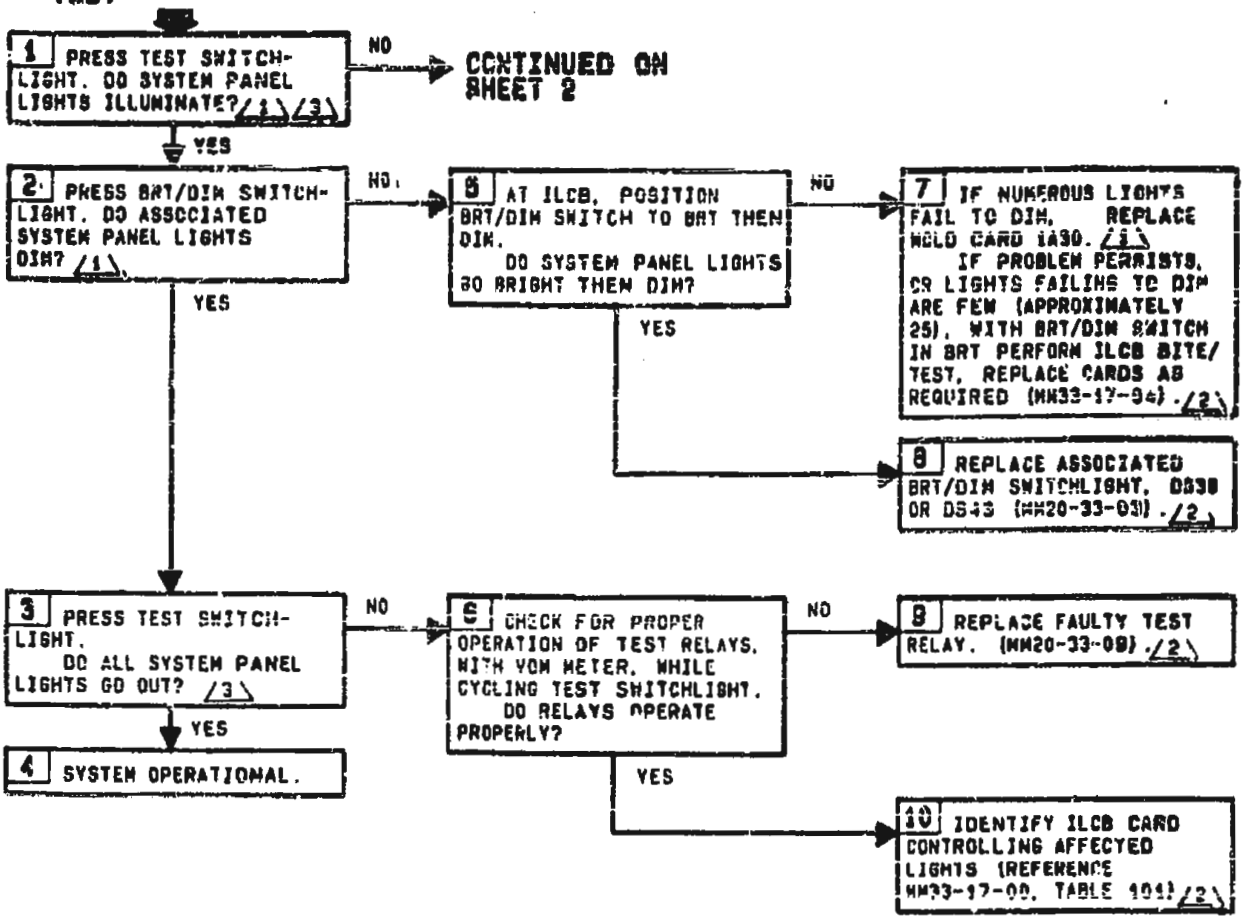
Component Location Index
Figure 101 (Sheet 2)



Component Locator Diagram
Figure 102

PREREQUISITES

ELECTRICAL POWER (MM24-00-00)
CB'S IN: CB1-L9
CB2-H1, H2, H3, H4, H5, H6, H8, H9, H10, J9, J4
CB3-G8, G9, G10
BRT/DIM SWITCHLIGHT IN BRT (UNLATCHED) POSITION.


(PILOTS'/FESOs') INDICATOR LIGHTS TEST
1 PRESS TEST SWITCHLIGHT. DO SYSTEM PANEL LIGHTS ILLUMINATE? /1\ /3\
NO
CONTINUED ON SHEET 2
YES
2 PRESS BRT/DIM SWITCHLIGHT. DO ASSOCIATED SYSTEM PANEL LIGHTS DIM? /1\
NO
5 AT ILCB, POSITION BRT/DIM SWITCH TO BRT THEN DIM.
DO SYSTEM PANEL LIGHTS GO BRIGHT THEN DIM?
NO
7 IF NUMEROUS LIGHTS FAIL TO DIM, REPLACE HOLD CARD 1A30. /1\
IF PROBLEM PERSISTS, OR LIGHTS FAILING TO DIM ARE FEW (APPROXIMATELY 25), WITH BRT/DIM SWITCH IN BRT PERFORM ILCB BITE/TEST, REPLACE CARDS AS REQUIRED (MM33-17-94). /2\
YES
8 REPLACE ASSOCIATED BRT/DIM SWITCHLIGHT, DS38 OR DS43 (MM20-33-03). /2\
YES
3 PRESS TEST SWITCHLIGHT.
DO ALL SYSTEM PANEL LIGHTS GO OUT? /3\
NO
6 CHECK FOR PROPER OPERATION OF TEST RELAYS, WITH VOM METER. WHILE CYCLING TEST SWITCHLIGHT.
DO RELAYS OPERATE PROPERLY?
NO
9 REPLACE FAULTY TEST RELAY. (MM20-33-09) /2\
YES
4 SYSTEM OPERATIONAL.
YES
10 IDENTIFY ILCB CARD CONTROLLING AFFECTED LIGHTS (REFERENCE MM33-17-00, TABLE 101) /2\

NOTE

/1\ ALL INDICATOR LIGHTS MAY NOT ILLUMINATE OR DIM, REFER TO TEST FOR EXCEPTIONS.

/2\ IF FAULT(S) PERSISTS, ASSOCIATED WIRING SHOULD BE CHECKED (SHORTS AND OPENS) MM33-17-03/04/05.

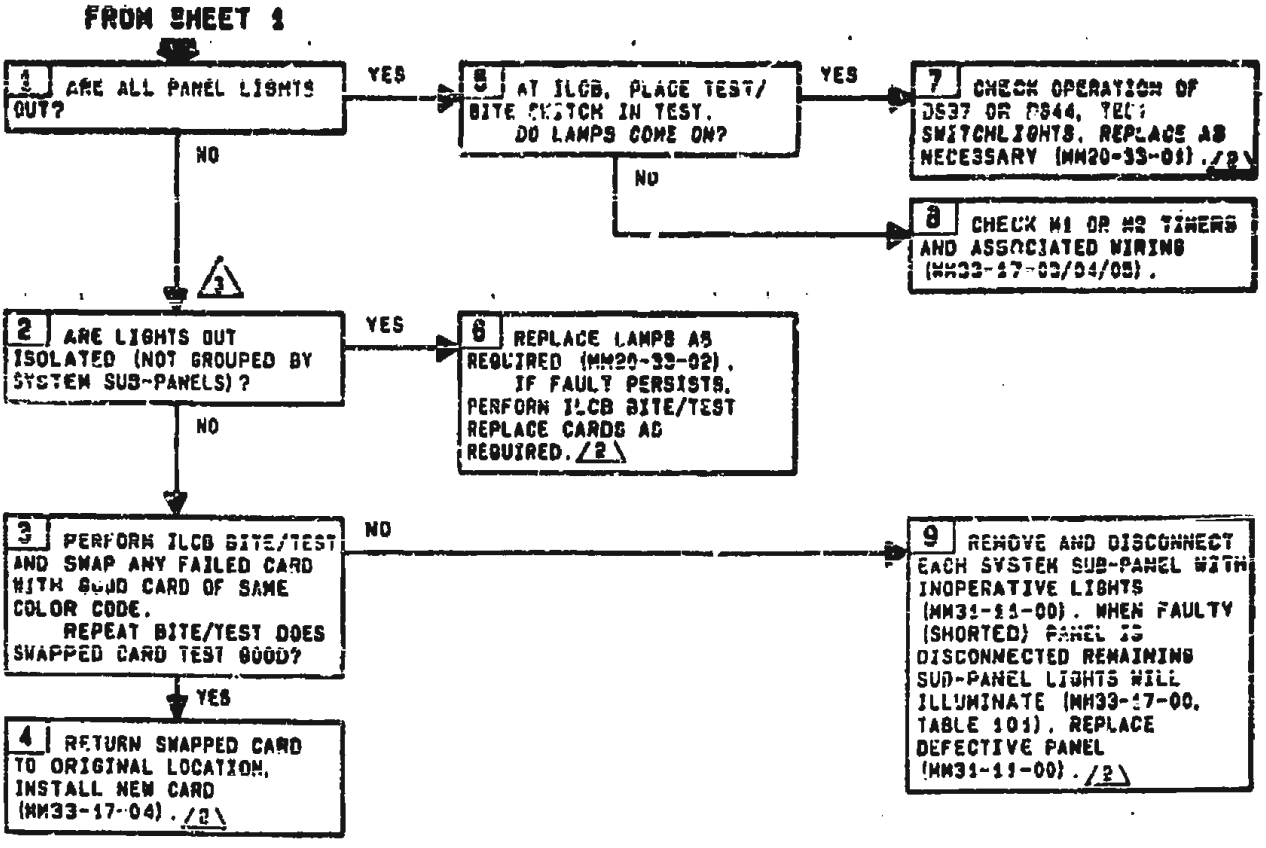
/3\ INDICATORS FOR NON-OPERATIONAL SYSTEMS WILL ILLUMINATE AND DIM BUT WILL NOT GO OFF.

4 ILCB PROBLEMS MAY BE CAUSED BY DIRTY CONNECTOR CONTACTS.

M1-0000-01-000

R Indicator Lights Test Fault Isolation
R Figure 103 (Sheet 1)

PREREQUISITES
SEE SHEET 1

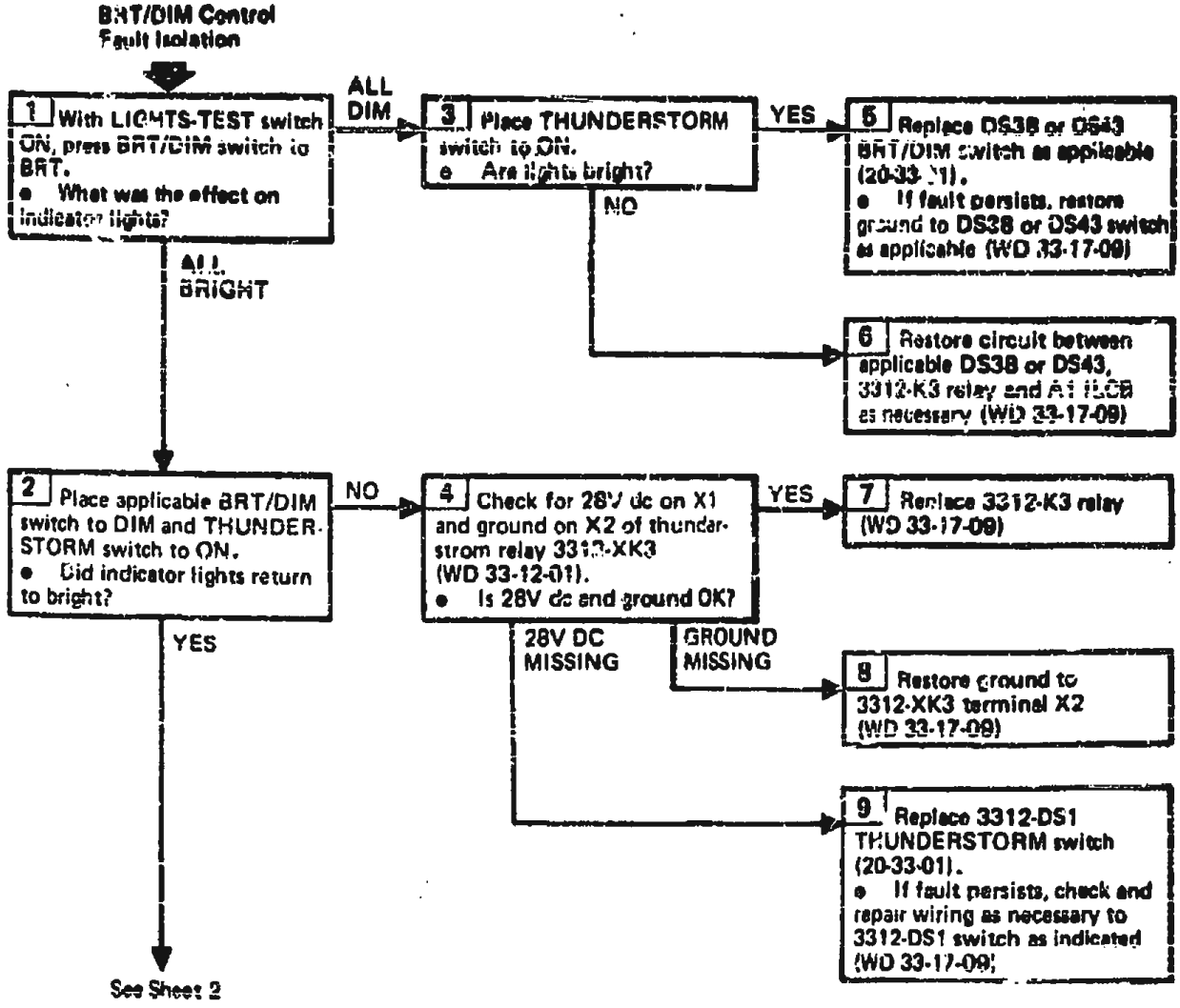

FROM SHEET 1
1 ARE ALL PANEL LIGHTS OUT?
YES
NO
2 ARE LIGHTS OUT ISOLATED (NOT GROUPED BY SYSTEM SUB-PANELS)?
YES
NO
3 PERFORM ILCB BITE/TEST AND SWAP ANY FAILED CARD WITH GOOD CARD OF SAME COLOR CODE. REPEAT BITE/TEST DOES SWAPPED CARD TEST GOOD?
NO
YES
4 RETURN SWAPPED CARD TO ORIGINAL LOCATION. INSTALL NEW CARD (MM33-17-04). /2\
5 AT ILCB, PLACE TEST/BITE SWITCH IN TEST. DO LAMPS COME ON?
YES
NO
6 REPLACE LAMPS AS REQUIRED (MM20-33-02). IF FAULT PERSISTS, PERFORM ILCB BITE/TEST REPLACE CARDS AS REQUIRED. /2\
7 CHECK OPERATION OF DS37 OR DS44, TEST SWITCHLIGHTS. REPLACE AS NECESSARY (MM20-33-01). /2\
8 CHECK M1 OR M2 TIMERS AND ASSOCIATED WIRING (MM33-17-03/04/05).
9 REMOVE AND DISCONNECT EACH SYSTEM SUB-PANEL WITH INOPERATIVE LIGHTS (MM31-11-00). WHEN FAULTY (SHORTED) PANEL IS DISCONNECTED REMAINING SUB-PANEL LIGHTS WILL ILLUMINATE (MM33-17-00, TABLE 101). REPLACE DEFECTIVE PANEL (MM31-11-00). /2\

NOTE

1. ALL INDICATOR LIGHTS MAY NOT ILLUMINATE OR DIM. REFER TO TEST FOR EXCEPTIONS.
2. IF FAULT PERSISTS; CHECK ASSOCIATED WIRING.
3. INDICATORS FOR NON-OPERATIONAL SYSTEMS WILL ILLUMINATE AND DIM BUT WILL NOT GO OFF.
4. ILCB PROBLEMS MAY BE CAUSED BY DIRTY CONNECTOR CONTACTS.

M1-0000-33-1000

R Indicator Lights Test Fault Isolation
R Figure 103 (Sheet 2)


BRT/DIM Control
Fault Isolation
1 With LIGHTS-TEST switch ON, press BRT/DIM switch to BRT.
• What was the effect on indicator lights?
ALL DIM
ALL BRIGHT
3 Place THUNDERSTORM switch to ON.
• Are lights bright?
YES
NO
5 Replace DS38 or DS43 BRT/DIM switch as applicable (20-33-01).
• If fault persists, restore ground to DS38 or DS43 switch as applicable (WD 33-17-09)
6 Restore circuit between applicable DS38 or DS43, 3312-K3 relay and A1 ILCB as necessary (WD 33-17-09)
2 Place applicable BRT/DIM switch to DIM and THUNDERSTORM switch to ON.
• Did indicator lights return to bright?
NO
YES
4 Check for 28V dc on X1 and ground on X2 of thunderstrom relay 3312-XK3 (WD 33-12-01).
• Is 28V dc and ground OK?
YES
7 Replace 3312-K3 relay (WD 33-17-09)
28V DC MISSING
GROUND MISSING
8 Restore ground to 3312-XK3 terminal X2 (WD 33-17-09)
9 Replace 3312-DS1 THUNDERSTORM switch (20-33-01).
• If fault persists, check and repair wiring as necessary to 3312-DS1 switch as indicated (WD 33-17-09)
See Sheet 2

NOTE

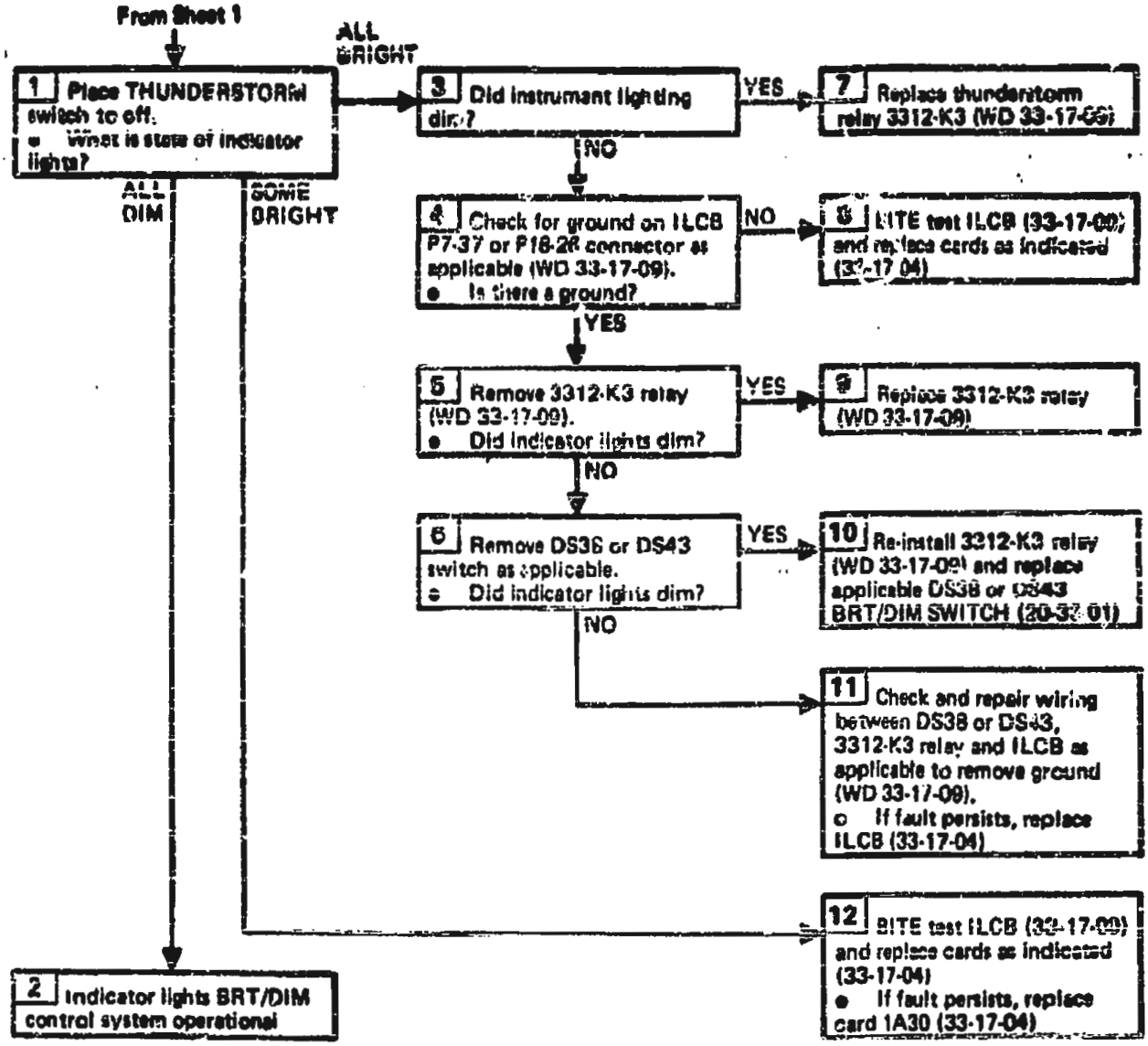
ILCB problems may be caused by dirty contacts on ILCB connectors. Keep contacts clean

PREREQUISITES

Elec Pwr (24-00-00)
CB's in: CB1-L9
CB2-H1, H2, H3, H4, H5, H8, H9, H10, J3, J4
CB3-G8, G9, G10

PM1-41004-33-881

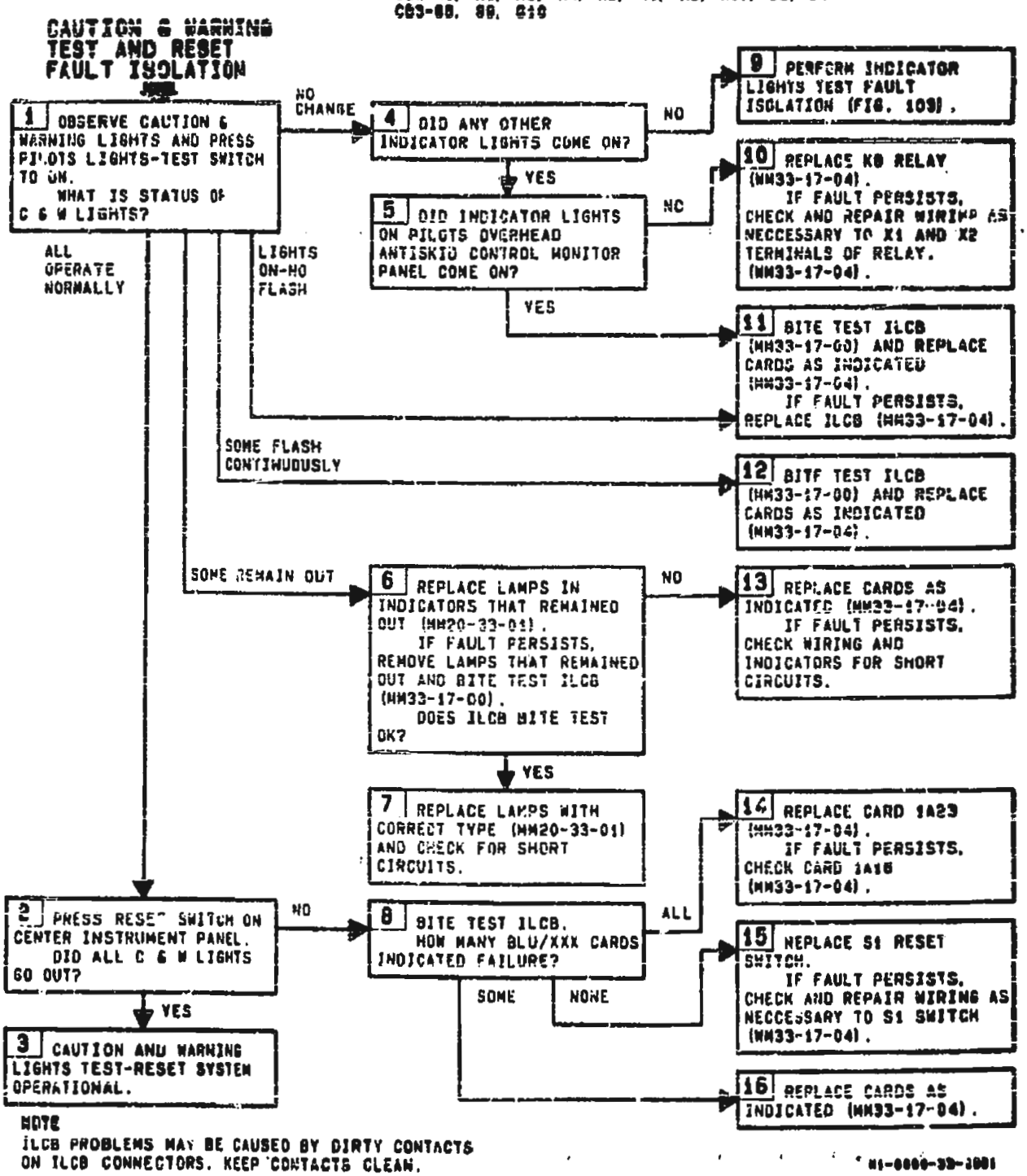
Indicator Lights BRT/DIM Control Fault Isolation
Figure 104 (Sheet 1)


From Sheet 1
1 Place THUNDERSTORM switch to off.
• What is state of indicator lights?
ALL DIM
SOME BRIGHT
ALL BRIGHT
2 Indicator lights BRT/DIM control system operational
3 Did instrument lighting dim?
YES
7 Replace thunderstorm relay 3312-K3 (WD 33-17-09)
NO
4 Check for ground on ILCB P7-37 or P18-28 connector as applicable (WD 33-17-09).
• Is there a ground?
NO
8 BITE test ILCB (33-17-00) and replace cards as indicated (33-17-04)
YES
5 Remove 3312-K3 relay (WD 33-17-09).
• Did indicator lights dim?
YES
9 Replace 3312-K3 relay (WD 33-17-09)
NO
6 Remove DS36 or DS43 switch as applicable.
• Did indicator lights dim?
YES
10 Re-install 3312-K3 relay (WD 33-17-09) and replace applicable DS38 or DS43 BRT/DIM SWITCH (20-32-01)
NO
11 Check and repair wiring between DS38 or DS43, 3312-K3 relay and ILCB as applicable to remove ground (WD 33-17-09).
o If fault persists, replace ILCB (33-17-04)
12 BITE test ILCB (33-17-00) and replace cards as indicated (33-17-04)
• If fault persists, replace card 1A30 (33-17-04)

Mi-41000-33-114

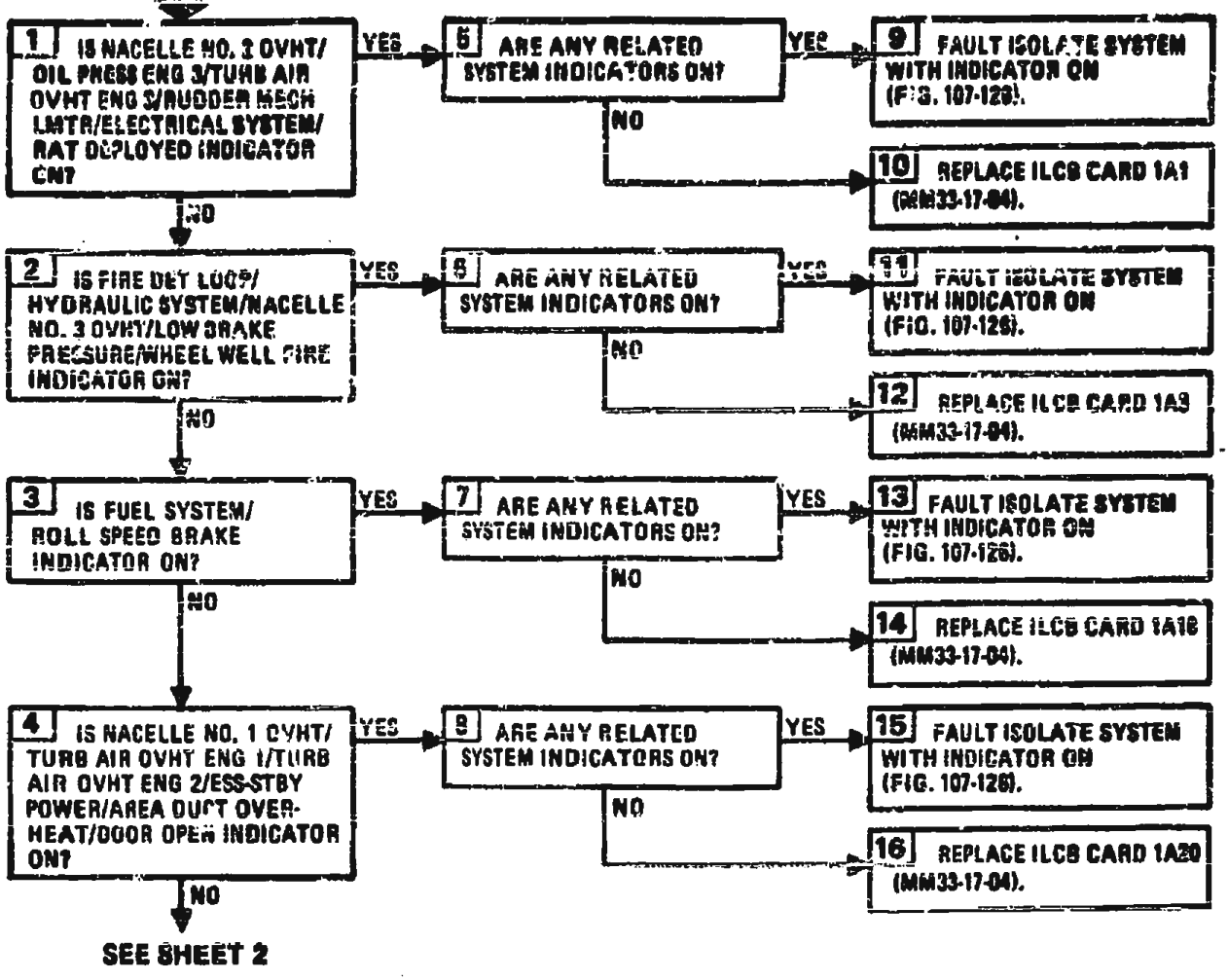
Indicator Lights BRT/DIM Control Fault Isolation
Figure 104 (Sheet 2)

PREREQUISITES
ELECTRICAL POWER (MM24-00-00)
CB'S: CB1-L2
CB2-H1, H2, H3, H4, H5, H8, H9, H10, J3, J4
CB3-B8, B9, B10


CAUTION & WARNING TEST AND RESET FAULT ISOLATION
1 OBSERVE CAUTION & WARNING LIGHTS AND PRESS PILOTS LIGHTS-TEST SWITCH TO ON. WHAT IS STATUS OF C & W LIGHTS?
NO CHANGE
4 DID ANY OTHER INDICATOR LIGHTS COME ON?
NO
9 PERFORM INDICATOR LIGHTS TEST FAULT ISOLATION (FIG. 103).
YES
5 DID INDICATOR LIGHTS ON PILOTS OVERHEAD ANTISKID CONTROL MONITOR PANEL COME ON?
NO
10 REPLACE K8 RELAY (MM33-17-04). IF FAULT PERSISTS, CHECK AND REPAIR WIRING AS NECCESSARY TO X1 AND X2 TERMINALS OF RELAY. (MM33-17-04).
YES
11 BITE TEST ILCB (MM33-17-00) AND REPLACE CARDS AS INDICATED (MM33-17-04). IF FAULT PERSISTS, REPLACE ILCB (MM33-17-04).
ALL OPERATE NORMALLY
LIGHTS ON-NO FLASH
SOME FLASH CONTINUOUSLY
12 BITE TEST ILCB (MM33-17-00) AND REPLACE CARDS AS INDICATED (MM33-17-04).
SOME REMAIN OUT
6 REPLACE LAMPS IN INDICATORS THAT REMAINED OUT (MM20-33-01). IF FAULT PERSISTS, REMOVE LAMPS THAT REMAINED OUT AND BITE TEST ILCB (MM33-17-00). DOES ILCB BITE TEST OK?
NO
13 REPLACE CARDS AS INDICATED (MM33-17-04). IF FAULT PERSISTS, CHECK WIRING AND INDICATORS FOR SHORT CIRCUITS.
YES
7 REPLACE LAMPS WITH CORRECT TYPE (MM20-33-01) AND CHECK FOR SHORT CIRCUITS.
2 PRESS RESET SWITCH ON CENTER INSTRUMENT PANEL. DID ALL C & W LIGHTS GO OUT?
NO
8 BITE TEST ILCB. HOW MANY BLU/XXX CARDS INDICATED FAILURE?
ALL
14 REPLACE CARD 1A29 (MM33-17-04). IF FAULT PERSISTS, CHECK CARD 1A16 (MM33-17-04).
SOME
NONE
15 REPLACE S1 RESET SWITCH. IF FAULT PERSISTS, CHECK AND REPAIR WIRING AS NECCESSARY TO S1 SWITCH (MM33-17-04).
16 REPLACE CARDS AS INDICATED (MM33-17-04).
YES
3 CAUTION AND WARNING LIGHTS TEST-RESET SYSTEM OPERATIONAL.
NOTE
ILCB PROBLEMS MAY BE CAUSED BY DIRTY CONTACTS ON ILCB CONNECTORS. KEEP CONTACTS CLEAN.

R Caution and Warning FE/SO Lights Test/Reset - Fault Isolation
R Figure 105

PREREQUISITES
ELECTRICAL POWER (MM24-00-00)
CBs IN: CB1-L9
CB2-H1, H2, H3, H4, H5, H8, H9, H10, J3, J4
CB3-G8, G9, G10

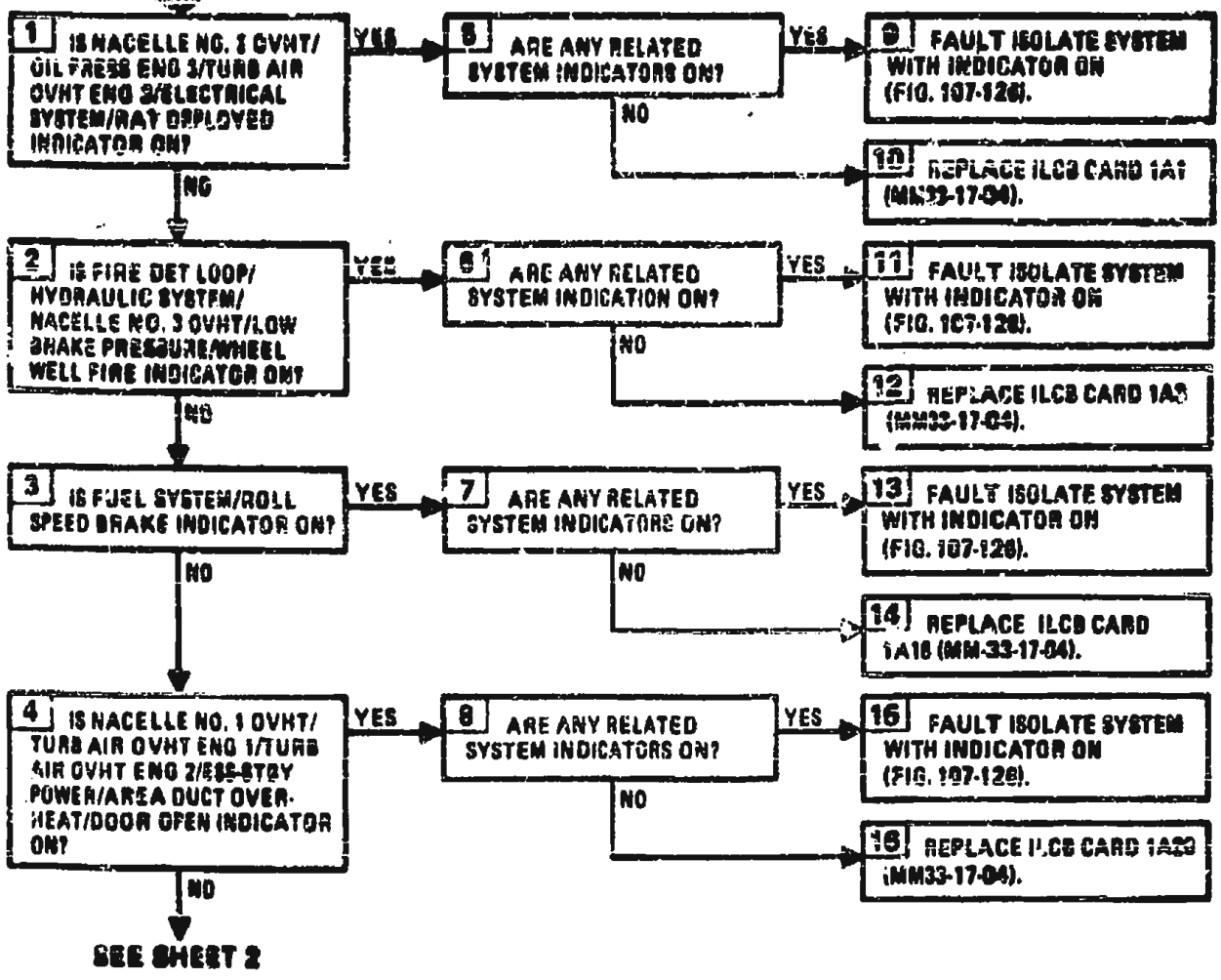

C&W INDICATOR ON
1 IS NACELLE NO. 2 OVHT/ OIL PRESS ENG 2/TURB AIR OVHT ENG 2/RUDDER MECH LMTR/ELECTRICAL SYSTEM/ RAT DEPLOYED INDICATOR ON?
YES
5 ARE ANY RELATED SYSTEM INDICATORS ON?
YES
9 FAULT ISOLATE SYSTEM WITH INDICATOR ON (FIG. 107-126).
NO
10 REPLACE ILCB CARD 1A1 (MM33-17-04).
NO
2 IS FIRE DET LOOP/ HYDRAULIC SYSTEM/NACELLE NO. 2 OVHT/LOW BRAKE PRESSURE/WHEEL WELL FIRE INDICATOR ON?
YES
6 ARE ANY RELATED SYSTEM INDICATORS ON?
YES
11 FAULT ISOLATE SYSTEM WITH INDICATOR ON (FIG. 107-126).
NO
12 REPLACE ILCB CARD 1A3 (MM33-17-04).
NO
3 IS FUEL SYSTEM/ ROLL SPEED BRAKE INDICATOR ON?
YES
7 ARE ANY RELATED SYSTEM INDICATORS ON?
YES
13 FAULT ISOLATE SYSTEM WITH INDICATOR ON (FIG. 107-126).
NO
14 REPLACE ILCB CARD 1A16 (MM33-17-04).
NO
4 IS NACELLE NO. 1 OVHT/ TURB AIR OVHT ENG 1/TURB AIR OVHT ENG 2/ESS-STBY POWER/AREA DUCT OVER-HEAT/DOOR OPEN INDICATOR ON?
YES
8 ARE ANY RELATED SYSTEM INDICATORS ON?
YES
15 FAULT ISOLATE SYSTEM WITH INDICATOR ON (FIG. 107-126).
NO
16 REPLACE ILCB CARD 1A20 (MM33-17-04).
NO
SEE SHEET 2

NOTE
ILCB PROBLEMS MAY BE CAUSED BY DIRTY CONTACTS ON ILCB CONNECTORS. KEEP CONTACTS CLEAN

M1-0002-33-151

Caution and Warning Panel Fault Isolation
Figure 106 (Sheet 1)

PREREQUISITES
ELECTRICAL POWER (MM24-00-00).
CSTB IN: CB1-L8
CB2-H1, H2, H3, H4, H5, H6, H8, H10, J9, J4
CB3-G8, G9, G10

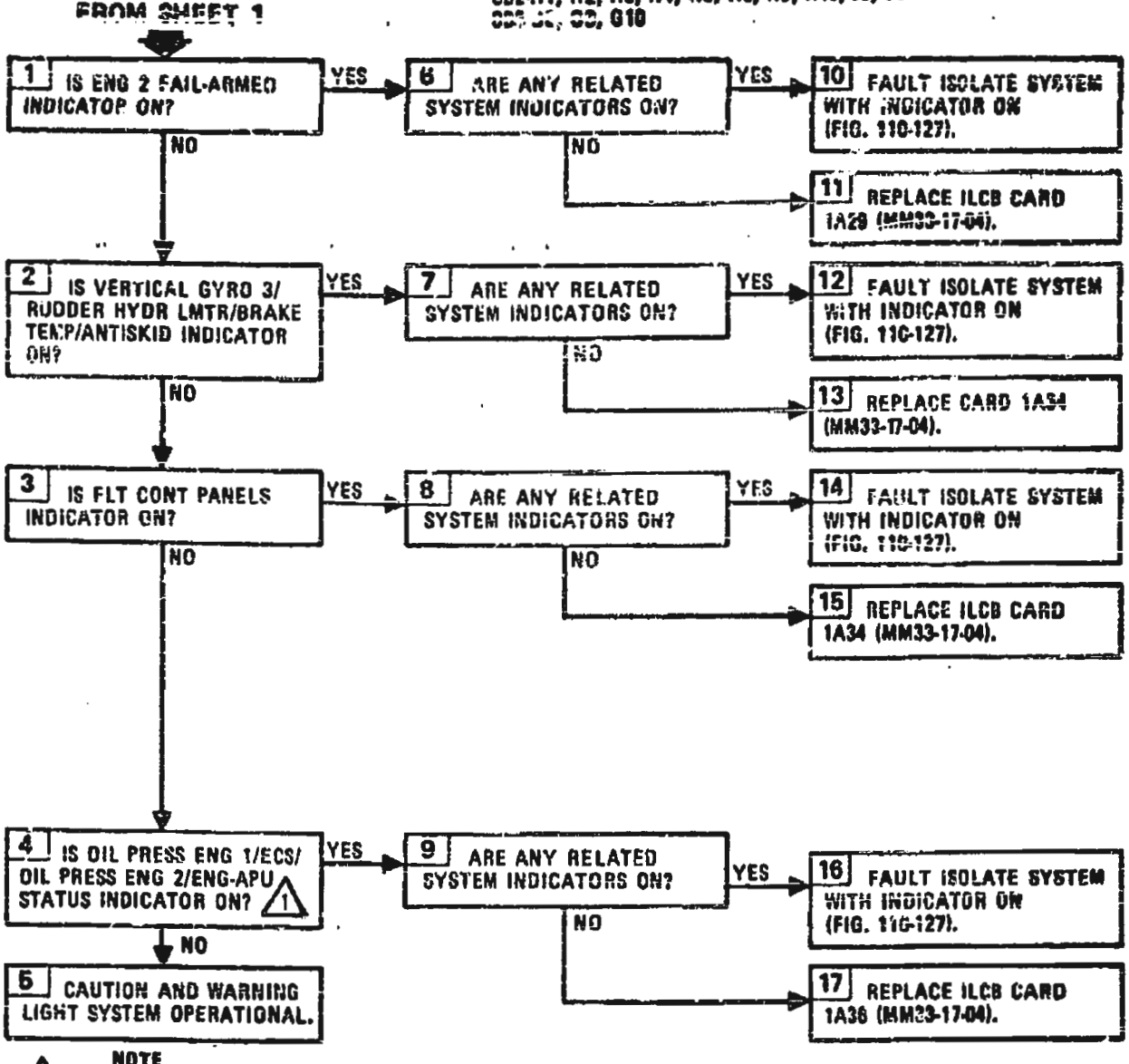

C&W INDICATOR ON
1 IS NACELLE NO. 1 OVHT/ OIL PRESS ENG 1/TURB AIR OVHT ENG 2/ELECTRICAL SYSTEM/RAT DEPLOYED INDICATOR ON?
YES
5 ARE ANY RELATED SYSTEM INDICATORS ON?
YES
9 FAULT ISOLATE SYSTEM WITH INDICATOR ON (FIG. 107-126).
NO
10 REPLACE ILCB CARD 1A1 (MM33-17-04).
NO
2 IS FIRE DET LOOP/ HYDRAULIC SYSTEM/ NACELLE NO. 3 OVHT/LOW BRAKE PRESSURE/WHEEL WELL FIRE INDICATOR ON?
YES
6 ARE ANY RELATED SYSTEM INDICATION ON?
YES
11 FAULT ISOLATE SYSTEM WITH INDICATOR ON (FIG. 107-126).
NO
12 REPLACE ILCB CARD 1A3 (MM33-17-04).
NO
3 IS FUEL SYSTEM/ROLL SPEED BRAKE INDICATOR ON?
YES
7 ARE ANY RELATED SYSTEM INDICATORS ON?
YES
13 FAULT ISOLATE SYSTEM WITH INDICATOR ON (FIG. 107-126).
NO
14 REPLACE ILCB CARD 1A18 (MM-33-17-04).
NO
4 IS NACELLE NO. 1 OVHT/ TURB AIR OVHT ENG 1/TURB AIR OVHT ENG 2/ESS STBY POWER/AREA DUCT OVER-HEAT/DOOR OPEN INDICATOR ON?
YES
8 ARE ANY RELATED SYSTEM INDICATORS ON?
YES
16 FAULT ISOLATE SYSTEM WITH INDICATOR ON (FIG. 107-126).
NO
15 REPLACE ILCB CARD 1A20 (MM33-17-04).
NO
SEE SHEET 2

NOTE
ILCB PROBLEMS MAY BE CAUSED BY DIRTY CONTACTS ON ILCB CONNECTORS. KEEP CONTACTS CLEAN

M1-0002-33-1126

Caution and Warning Panel Fault Isolation
Figure 106 (Sheet 1)

PREREQUISITES
ELECTRICAL POWER (MM24-00-00)
CB'S IN: CB1-L9
CB2-H1, H2, H3, H4, H5, H8, H9, H10, J2, J4
[illegible], C3, G10


FROM SHEET 1
1 IS ENG 2 FAIL-ARMED INDICATOP ON?
YES
6 ARE ANY RELATED SYSTEM INDICATORS ON?
YES
10 FAULT ISOLATE SYSTEM WITH INDICATOR ON (FIG. 110-127).
NO
11 REPLACE ILCB CARD 1A28 (MM33-17-04).
2 IS VERTICAL GYRO 3/ RUDDER HYDR LMTR/BRAKE TEMP/ANTISKID INDICATOR ON?
YES
7 ARE ANY RELATED SYSTEM INDICATORS ON?
YES
12 FAULT ISOLATE SYSTEM WITH INDICATOR ON (FIG. 110-127).
NO
13 REPLACE CARD 1A34 (MM33-17-04).
3 IS FLT CONT PANELS INDICATOR ON?
YES
8 ARE ANY RELATED SYSTEM INDICATORS ON?
YES
14 FAULT ISOLATE SYSTEM WITH INDICATOR ON (FIG. 110-127).
NO
15 REPLACE ILCB CARD 1A34 (MM33-17-04).
4 IS OIL PRESS ENG 1/ECS/ OIL PRESS ENG 2/ENG-APU STATUS INDICATOR ON? 1
YES
9 ARE ANY RELATED SYSTEM INDICATORS ON?
YES
16 FAULT ISOLATE SYSTEM WITH INDICATOR ON (FIG. 110-127).
NO
17 REPLACE ILCB CARD 1A36 (MM33-17-04).
5 CAUTION AND WARNING LIGHT SYSTEM OPERATIONAL.

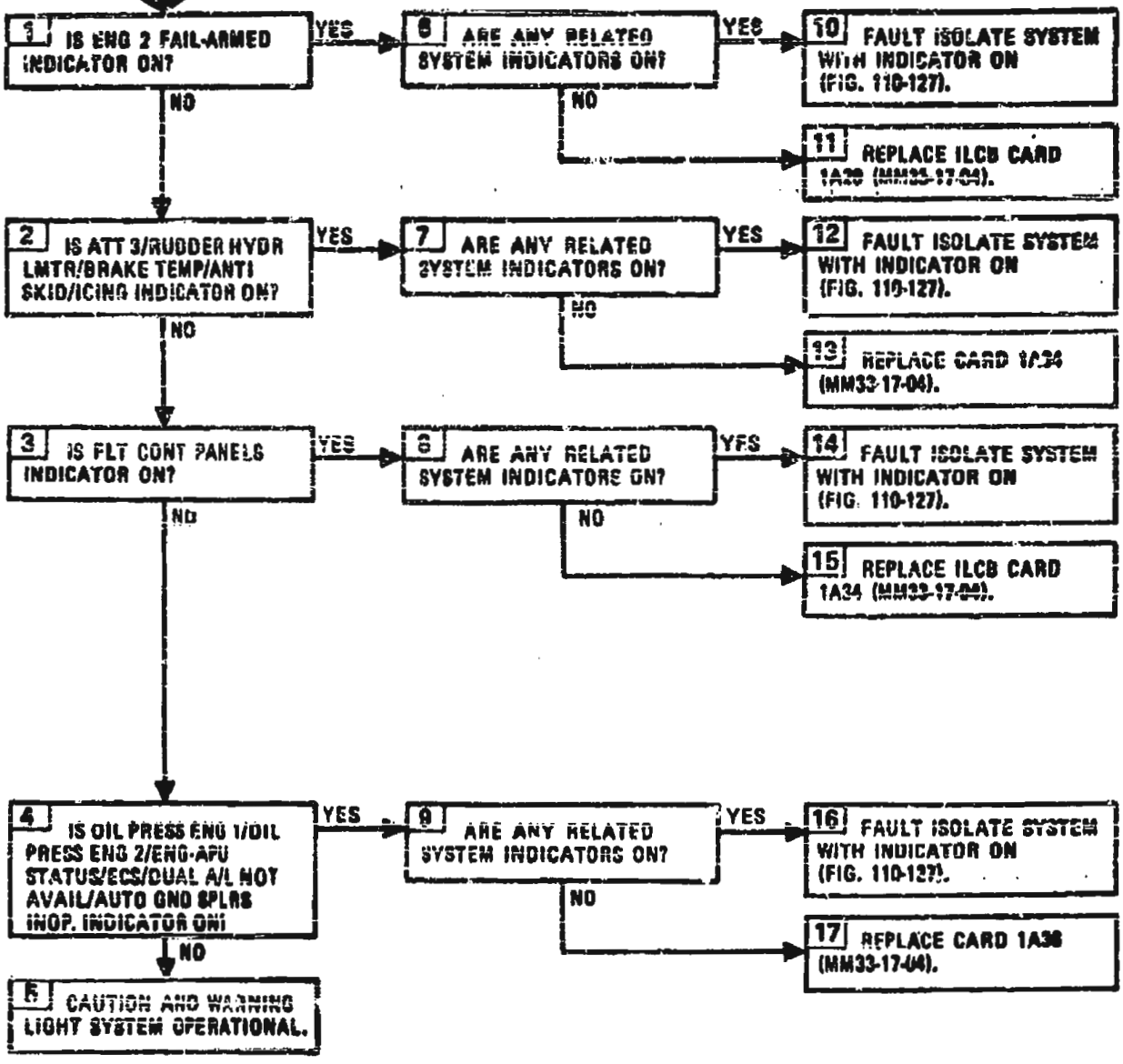
1 **NOTE**
ILLUMINATION OF THE ECS CAUTION AND WARNING LIGHT WHENEVER THE FWD AND MID AVIONICS AIR OVERBOARD LIGHTS ILLUMINATE MAY NOT BE A FAILURE. THIS IS A DESIGN FEATURE THAT WAS REMOVED FROM LATER AIRCRAFT BY REDESIGN OF THE 1A36 CAUTION AND WARNING LIGHT DRIVER CARD LOCATED IN THE ILCB.

2 ILCB PROBLEMS MAY BE CAUSED BY DIRTY CONTACTS ON ILCB CONNECTORS. KEEP CONTACTS CLEAN.

M1-0002-33-1273

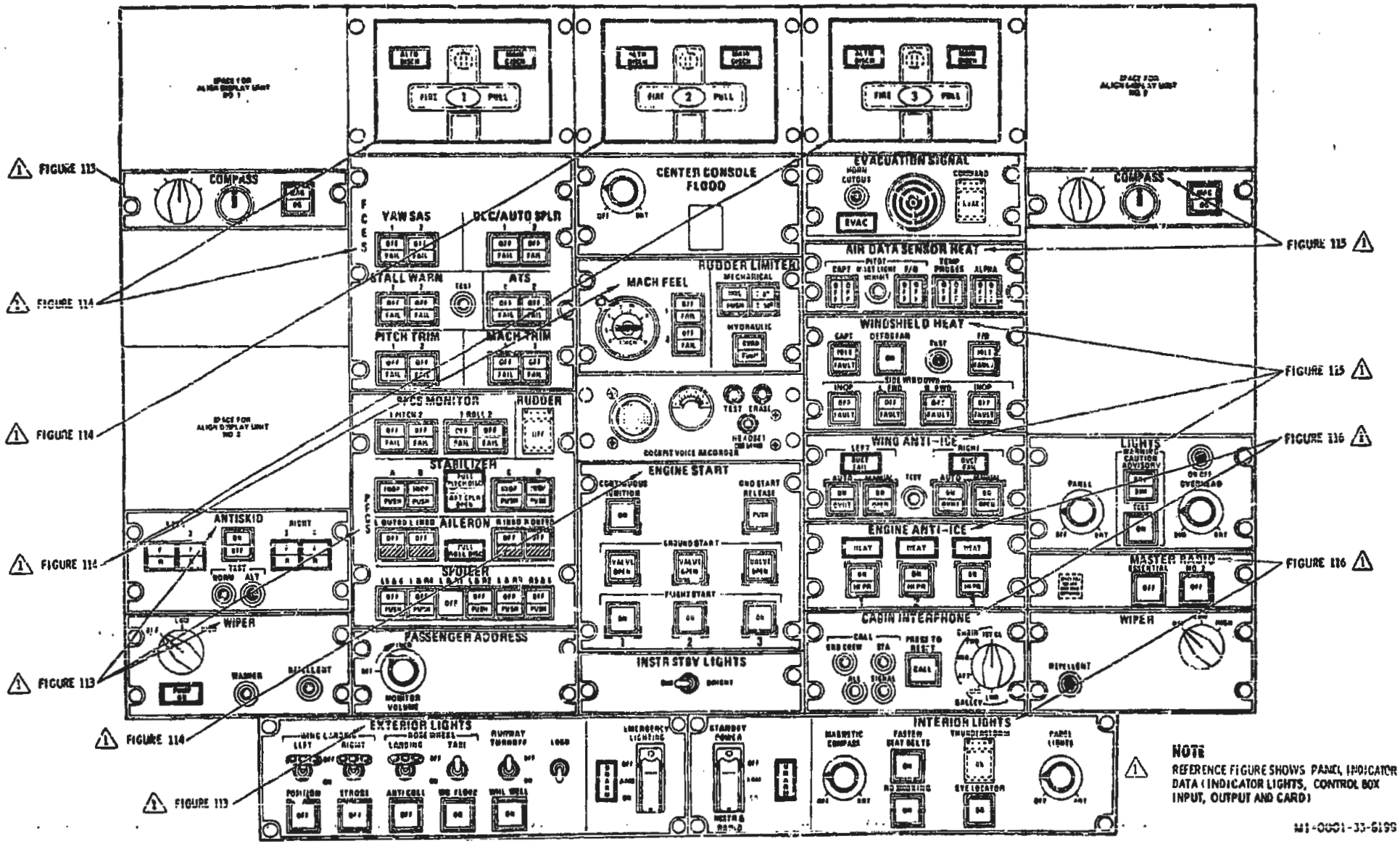
Caution and Warning Panel Fault Isolation
Figure 106 (Sheet 2)

PREREQUISITES
ELECTRICAL POWER (MM24-00-00)
CB'S IN: CB1-L6
CB2-M1, M2, M3, M4, M5, M8, M9, M10, M11, M12
CB3-G8, G9, G10, G12

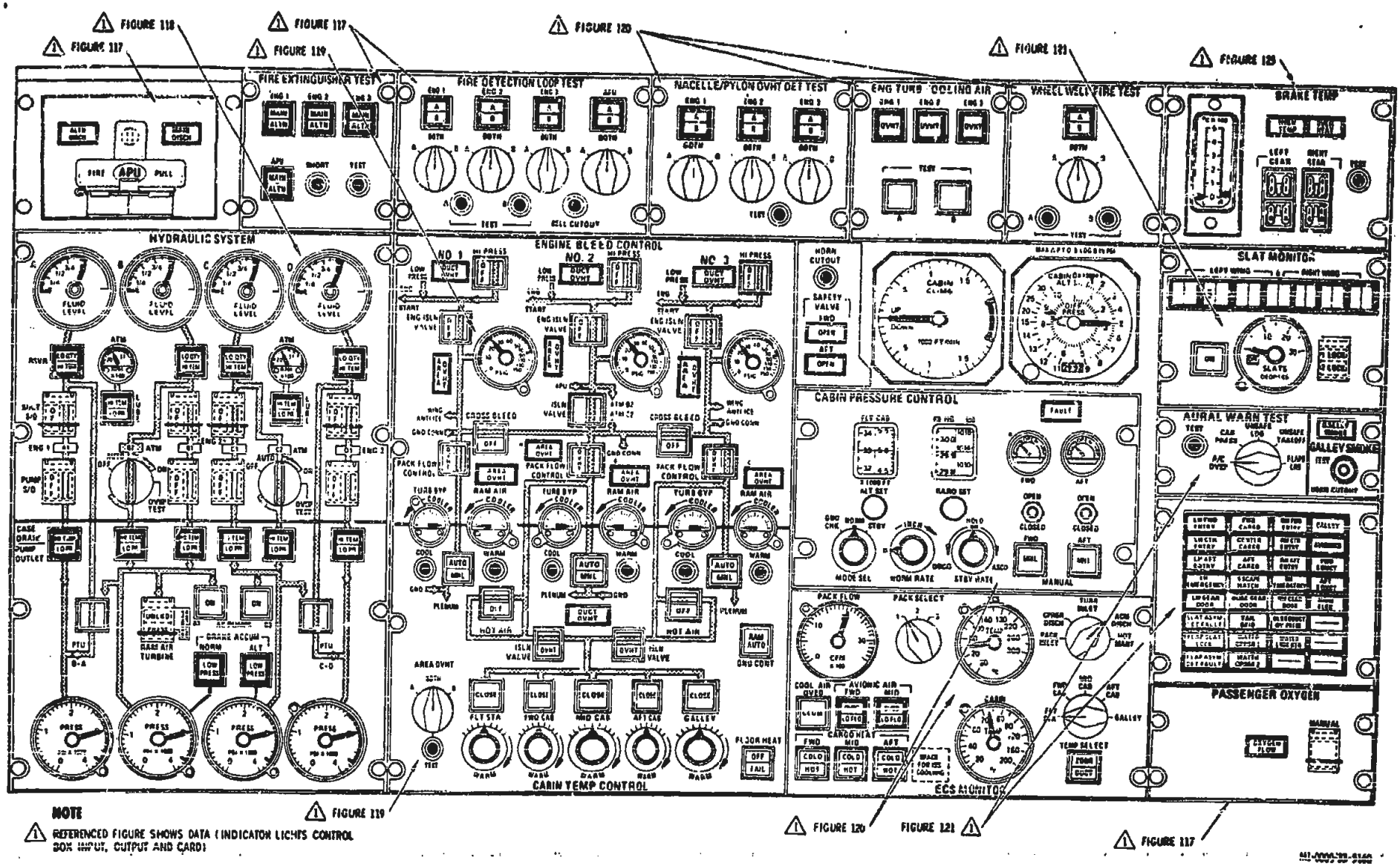

FROM SHEET 1
1 IS ENG 2 FAIL-ARMED INDICATOR ON?
YES
6 ARE ANY RELATED SYSTEM INDICATORS ON?
YES
10 FAULT ISOLATE SYSTEM WITH INDICATOR ON (FIG. 110-127).
NO
11 REPLACE ILCB CARD 1A29 (MM33-17-04).
NO
2 IS ATT 3/RUDDER HYDR LMTR/BRAKE TEMP/ANTI SKID/ICING INDICATOR ON?
YES
7 ARE ANY RELATED SYSTEM INDICATORS ON?
YES
12 FAULT ISOLATE SYSTEM WITH INDICATOR ON (FIG. 110-127).
NO
13 REPLACE CARD 1A34 (MM33-17-04).
NO
3 IS FLT CONT PANELS INDICATOR ON?
YES
8 ARE ANY RELATED SYSTEM INDICATORS ON?
YES
14 FAULT ISOLATE SYSTEM WITH INDICATOR ON (FIG. 110-127).
NO
15 REPLACE ILCB CARD 1A34 (MM33-17-04).
NO
4 IS OIL PRESS ENG 1/OIL PRESS ENG 2/ENG-APU STATUS/ECS/DUAL A/L NOT AVAIL/AUTO GND SPLRS INOP. INDICATOR ON?
YES
9 ARE ANY RELATED SYSTEM INDICATORS ON?
YES
16 FAULT ISOLATE SYSTEM WITH INDICATOR ON (FIG. 110-127).
NO
17 REPLACE CARD 1A36 (MM33-17-04).
NO
5 CAUTION AND WARNING LIGHT SYSTEM OPERATIONAL.

M1-0000-33-3020

R Caution and Warning Panel Fault Isolation
R Figure 106 (Sheet 2)



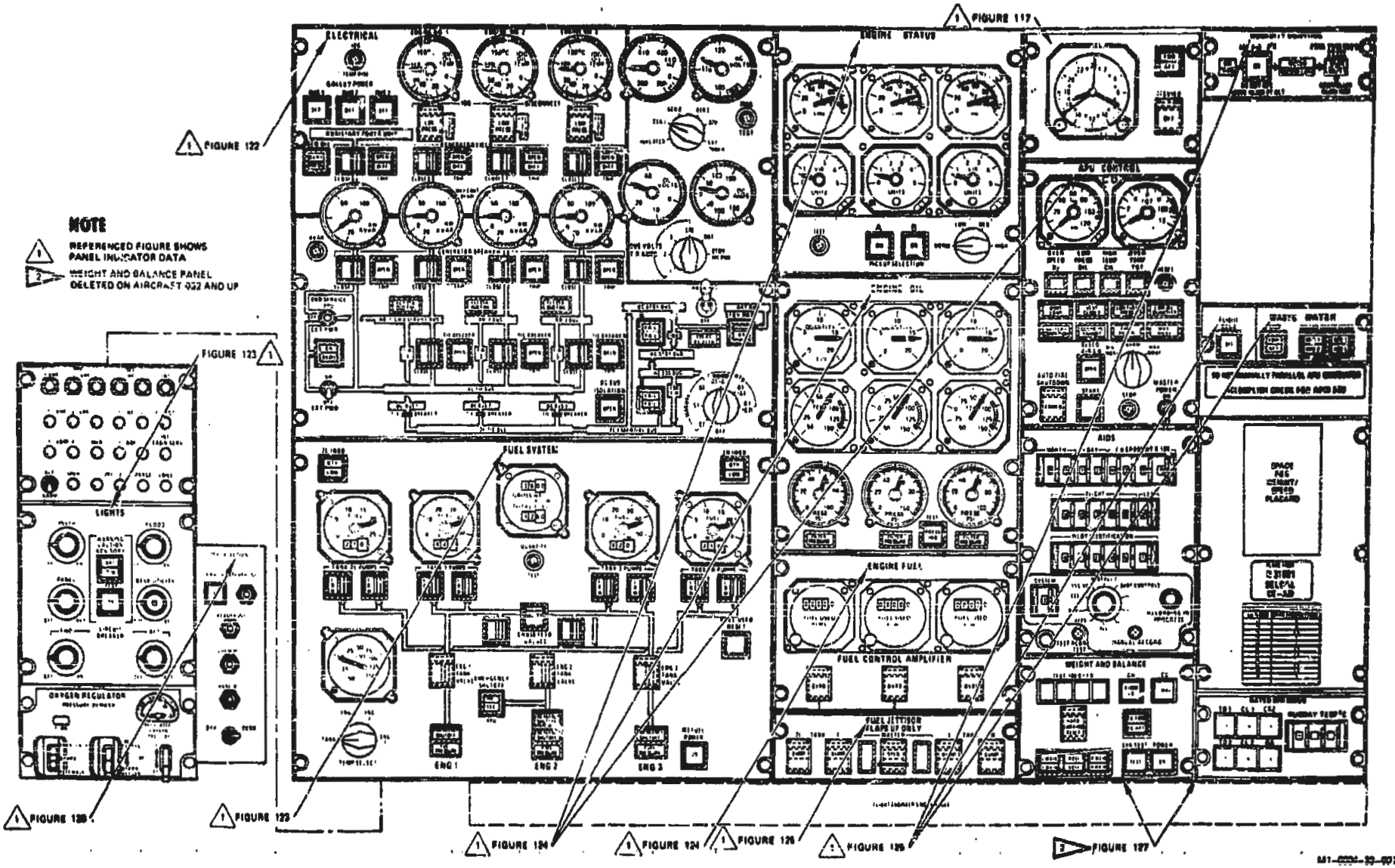
R
R Indicator Data Locator - Pilots Overhead Panel
Figure 107



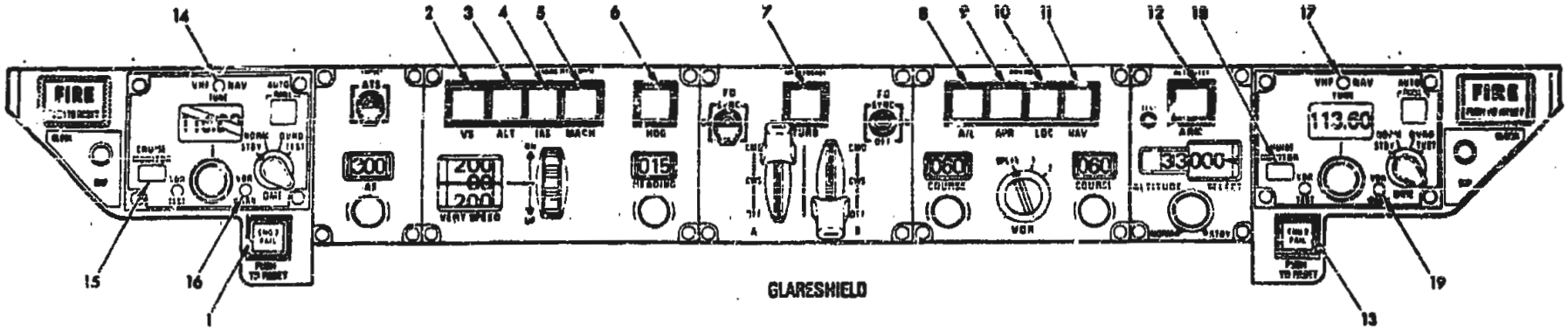
NOTE

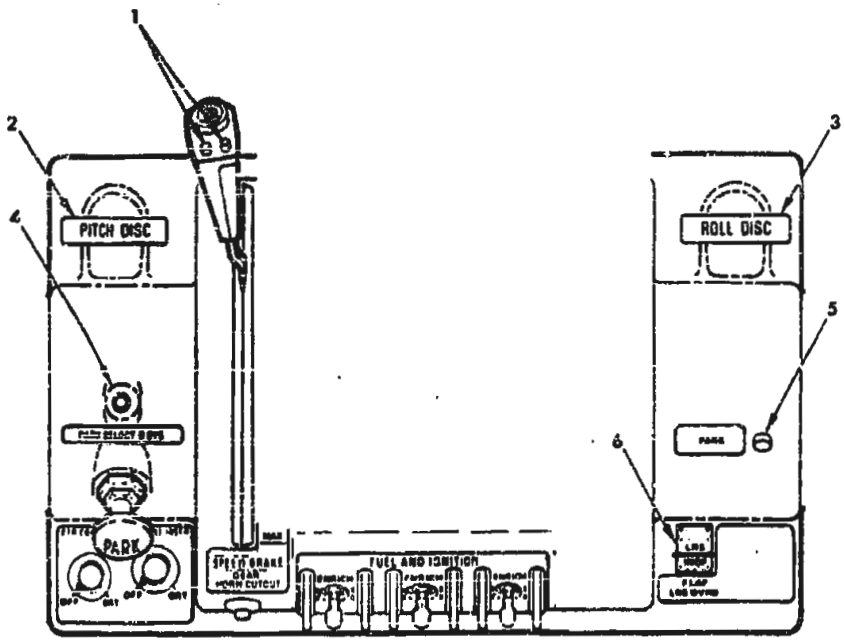
⚠ REFERENCED FIGURE SHOWS DATA (INDICATOR LIGHTS CONTROL BOX INPUT, OUTPUT AND CARD)

R Indicator Data Locator - Flight Engineer/Second Officers
R Upper Instrument Panel
R Figure 108



Indicator Data Locator - Flight Engineer/Second Officers
Lower Instrument Panel
Figure 109





NOTE

1 PROVISIONS ONLY (NOT USED)

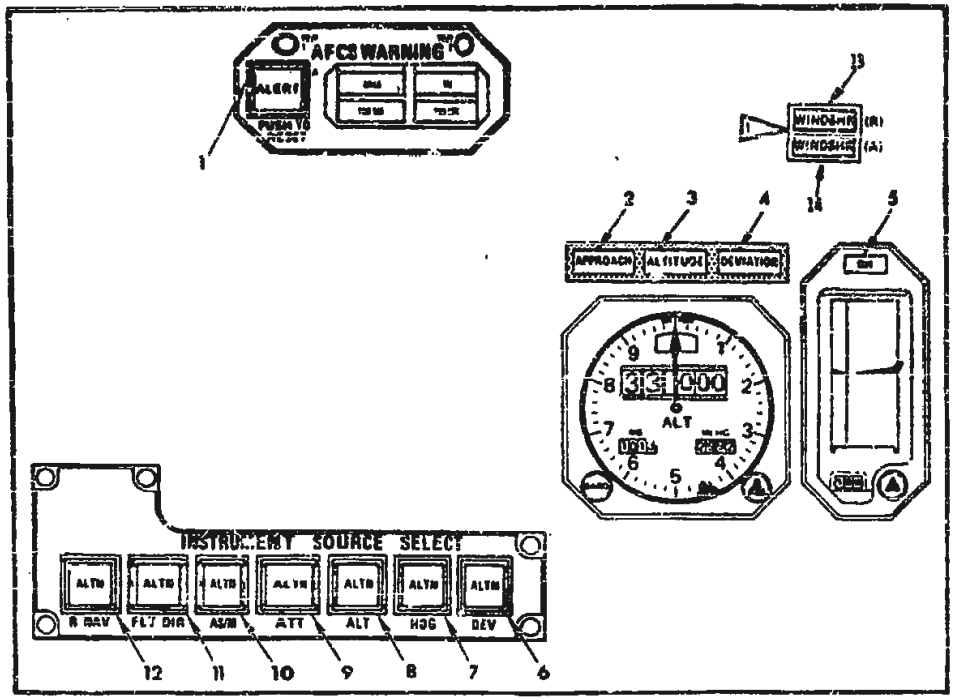
CENTER CONSOLE							
IND NO.	LEGEND	BOX TEST INPUT CONN & PIN NO.	BOX SIGNAL INPUT CONN AND PIN NO.	CARD DRIVER AND INPUT SIG	TEST RELAY TITLE AND PINS	BOX OUTPUT CONN & PIN NO.	ATA REF.
1	AMBER	P17-17	P7-4	1A27-26 GND	LOTS NO. 4-A	P15-53	22-17-00
2	PITCH DISC	P11-5	P11-5	1A2-C POS	LOTS NO. 3-D	P7-18	22-17-00
3	ROLL DISC	P11-5	P11-5	1A2-C POS	LOTS NO. 3-D	P7-18	22-17-00
4	RED	P17-30	P16-30	1A29-9 POS.	LOTS NO. 2-B	P5-18	22-48-00
5	RED	P17-30	P16-30	1A29-9 POS	LOTS NO. 2-B	P5-18	22-48-00
6	LRS INOP	P17-31	P7-34	1A27-21 GND	LOTS NO. 3-C	P5-22	34-34-00

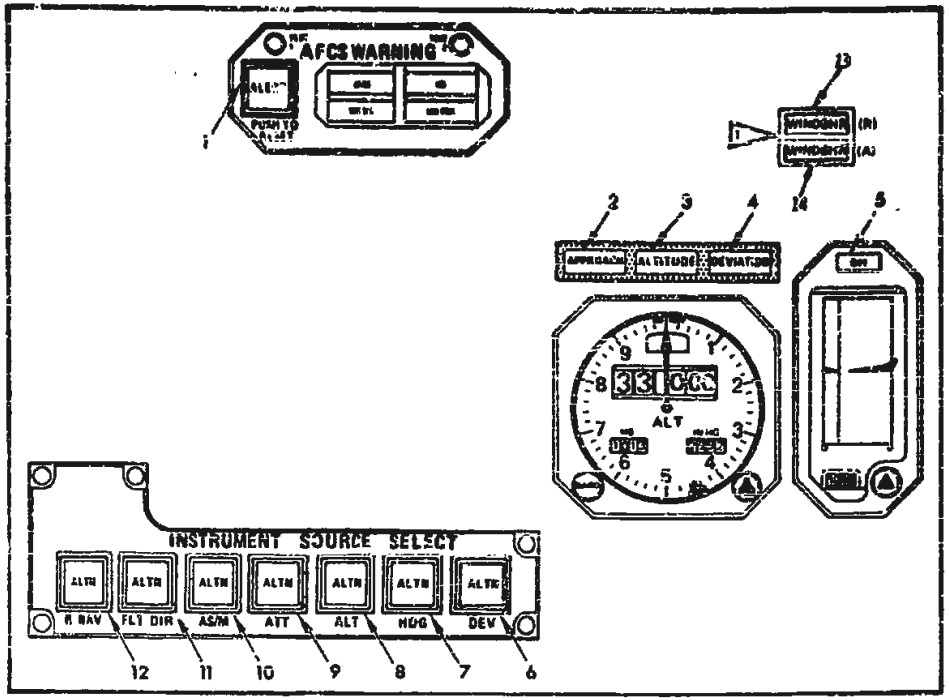
GLARESHIELD							
IND NO	LEGEND	BOX TEST INPUT CONN & PIN NO.	BOX SIGNAL INPUT CONN AND PIN NO	CARD DRIVER AND INPUT SIG	TEST RELAY TITLE AND PINS	BOX OUTPUT CONN & PIN NO.	ATA REF.
1	ENG 2 FAIL	P17-30	P16-31	1A27-13 POS	LOTS NO. 2-B	P5-21	77-14-00
2	WHITE	P5-17	P5-17	1A2-E POS	LOTS NO. 3-C	P7-2	22-11-00
3	WHITE	P5-17	P5-17	1A2-E POS	LOTS NO. 3-C	P7-2	22-11-00
4	WHITE	P5-17	P5-17	1A2-E POS	LOTS NO. 3-C	P7-2	22-11-00
5	WHITE	P5-17	P5-17	1A2-E POS	LOTS NO. 3-C	P7-2	22-11-00
6	WHITE	P5-17	P5-17	1A2-E POS	LOTS NO. 3-C	P7-2	22-11-00
7	WHITE	P5-17	P5-17	1A2-E POS	LOTS NO. 3-C	P7-2	22-13-00
8	WHITE	P5-17	P5-17	1A2-E POS	LOTS NO. 3-C	P7-2	22-13-00
9	WHITE	P5-17	P5-17	1A2-E POS	LOTS NO. 3-C	P7-2	22-13-00
10	WHITE	P5-17	P5-17	1A2-E POS	LOTS NO. 3-C	P7-2	22-13-00
11	WHITE	P5-17	P5-17	1A2-E POS	LOTS NO. 3-C	P7-2	22-13-00
12	WHITE	P5-17	P5-17	1A2-E POS	LOTS NO. 3-C	P7-2	22-11-00
13	ENG 2 FAIL	P17-30	P17-44	1A27-14 POS	LOTS NO. 2-B	P5-20	77-14-00
14	AMBER	P17-30	P17-50	1A9-14 POS	LOTS NO. 2-B	P11-3	34-55-00
15	ILS		P11-5	1A2-C POS	LOTS NO. 4-B	P7-16	34-55-00
16	RED		P11-5	1A2-C POS	LOTS NO. 4-B	P7-16	34-55-00
17	AMBER	P17-36	P9-44	1A14-12 POS	LOTS NO. 3-B	P5-27	34-55-00
18	ILS		P11-5	1A2-C POS	LOTS NO. 4-B	P7-16	34-55-00
19	RED		P11-5	1A2-C POS	LOTS NO. 4-B	P7-16	34-55-00

1 1

M1-0031-33-015

Indicator Signals - Glareshield Panels and Pilots Center Console
Figure 110





CAPTAINS INSTRUMENT PANEL

IND NO.	LEGEND	BOX TEST INPUT CONN & PIN NO.	BOX SIGNAL INPUT CONN & PIN NO.	CARD DRIVER AND INPUT SIG	TEST RELAY TITLE & PINS	BOX OUTPUT CONN & PIN NO.	ATA REF
1	ALERT	---	---	---	---	---	22-00-00
2	APPROACH	P14-1	P14-1	1A35-C POS	PILOTS NO. 1-D	P6-42	22-17-00
3	ALTITUDE	P14-1	P14-1	1A35-C POS	PILOTS NO. 1-D	P6-42	22-17-00
4	DEVIATION	P14-1	P14-1	1A35-C POS	PILOTS NO. 1-D	P6-42	22-17-00
5	DH	P11-38	P11-38	1A19-C POS	PILOTS NO. 2-D	P7-14	34-32-00
6	ALTN	P17-26	P6-46	1A27-6 POS	PILOTS NO. 1-C	P6-13	34-00-00
7	ALTN	P17-26	P6-47	1A27-7 POS	PILOTS NO. 1-C	P6-14	34-00-00
8	ALTN	P17-26	P7-9	1A27-11 POS	PILOTS NO. 1-C	P6-10	34-00-00
9	ALTN	P17-26	P7-3	1A27-8 POS	PILOTS NO. 1-C	P6-11	34-00-00
10	ALTN	P17-26	P7-8	1A27-10 POS	PILOTS NO. 1-C	P6-9	34-00-00
11	ALTN	P17-26	P6-43	1A27-4 POS	PILOTS NO. 1-C	P6-12	34-00-00
12	ALTN	P17-26	C18-14	1A27-1 POS	PILOTS NO. 1-C	P6-20	22-00-00
13	WINDSHR		P6-49	1A28 POS		P6-41	34-19-00
14	WINDSHR		P6-49	1A28 POS		P6-42	34-19-00

IND NO.	LEGEND	BOX TEST INPUT CONN & PIN NO.	BOX SIGNAL INPUT CONN & PIN NO.	CARD DRIVER AND INPUT SIG	TEST RELAY TITLE & PINS	BOX OUTPUT CONN & PIN NO.	ATA REF.
1	ALERT	---	---	---	---	---	22-00-00
2	APPROACH	P14-1	P14-1	1A35-C POS	P LOTS NO. 1-D	P6-42	22-17-00
3	ALTITUDE	P14-1	P14-1	1A35-C POS	P LOTS NO. 1-D	P6-42	22-17-00
4	DEVIATION	P14-1	P14-1	1A35-C POS	P LOTS NO. 1-D	P6-42	22-17-00
5	DH	P11-38	P11-38	1A19-C POS	P LOTS NO. 2-D	P7-14	34-32-00
6	ALTN	P17-26	P6-46	1A29-5 POS	P LOTS NO. 1-C	P6-5	34-00-00
7	ALTN	P17-26	P6-48	1A29-7 POS	P LOTS NO. 1-C	P6-6	34-00-00
8	ALTN	P17-26	P7-10	1A29-8 POS	P LOTS NO. 1-C	P6-2	34-00-00
9	ALTN	P17-26	P7-11	1A29-10 POS	P LOTS NO. 1-C	P6-3	34-00-00
10	ALTN	P17-26	P7-12	1A29-11 POS	P LOTS NO. 1-C	P6-1	34-00-00
11	ALTN	P17-26	P6-44	1A29-4 POS	P LOTS NO. 1-C	P6-4	34-00-00
12	ALTN	P17-26	P18-15	1A27-16 POS	P LOTS NO. 1-C	P6-51	22-00-00
13	WINDSHR		P13-55			P11-24	34-19-00
14	WINDSHR		P20-44			P11-38	22-15-00

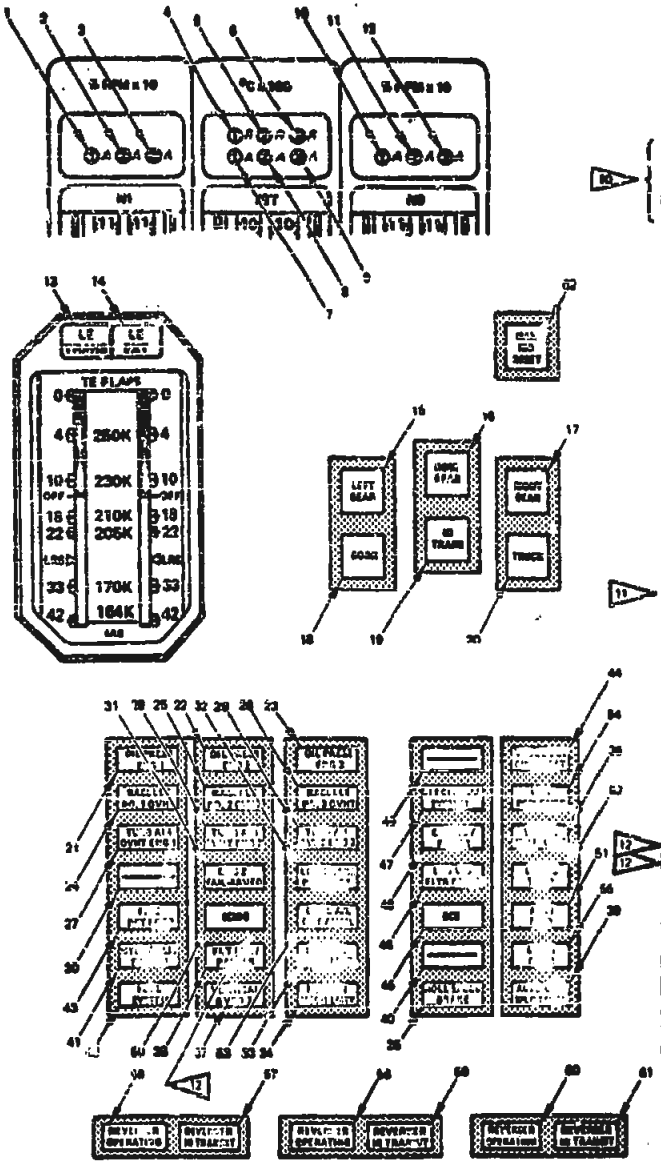
NOTE
ON AIRCRAFT WITH 5834-178

M1-0002-33-030

R Indicator Signals - Pilots Instrument Panels
R Figure 111

EFFECTIVITY: ALL

007B



	LEGEND	BOX TEST INPUT CONN & PIN NO.	BOX SIGNAL INPUT CONN & PIN NO.	CARD DRIVER AND INPUT SIG	TEST RELAY TITLE & PIN	BOX OUTPUT CONN & PIN NO.	ATA REF.
1	(AMBER)	P5-24	P5-24	1A19-E POS	PILOTS NO. 1-A	P7-5	77-13-00
2	(AMBER)	P5-24	P5-24	1A19-E POS	PILOTS NO. 1-A	P7-5	77-13-00
3	(AMBER)	P5-24	P5-24	1A19-E POS	PILOTS NO. 1-A	P7-5	77-13-00
4	(RED)	P5-24	P5-24	1A19-E POS	PILOTS NO. 1-A	P7-5	77-31-00
5	(RED)	P5-24	P5-24	1A19-E POS	PILOTS NO. 1-A	P7-5	77-31-00
6	(RED)	P5-24	P5-24	1A19-E POS	PILOTS NO. 1-A	P7-5	77-31-00
7	(AMBER)	P5-24	P5-24	1A19-E POS	PILOTS NO. 1-A	P7-5	77-31-00
8	(AMBER)	P5-24	P5-24	1A19-E POS	PILOTS NO. 1-A	P7-5	77-31-00
9	(AMBER)	P5-24	P5-24	1A19-E POS	PILOTS NO. 1-A	P7-5	77-31-00
10	(AMBER)	P5-24	P5-24	1A19-E POS	PILOTS NO. 1-A	P7-5	77-13-00
11	(AMBER)	P5-24	P5-24	1A19-E POS	PILOTS NO. 1-A	P7-5	77-13-00
12	(AMBER)	P5-24	P5-24	1A19-E POS	PILOTS NO. 1-A	P7-5	77-13-00
13	L3 IN TRANS	P17-35	P5-19	1A20-3 POS	PILOTS NO. 1-C	P15-49	27-61-00
14	LE EXT	P17-35	P5-20	1A20-12 POS	PILOTS NO. 1-C	P7-17	27-61-00
15	LEFT GEAR	P17-37	P5-27	1A27-17 GND	PILOTS NO. 3-C	P15-50	32-61-00
16	NOSE GEAR	P17-37	P15-10		PILOTS NO. 3-C	P15-49	32-61-00
17	RIGHT GEAR	P17-37	P15-19	1A27-19 GND	PILOTS NO. 3-C	P15-52	32-61-00
18	GOOD	P17-38	P16-34	1A5-13 POS	PILOTS NO. 1-C	P15-48	32-51-00
19	IN TRANS	P17-35	P15-20	1A13-15 POS	PILOTS NO. 1-C	P15-47	32-61-00
20	TRUCK	P17-35	P15-21	1A13-16 POS	PILOTS NO. 1-C	P15-51	32-61-00
21	OIL PRESS ENG 1	P17-20	P22-19	1A22 D GND	PILOTS NO. 4-D&E	P15-1	79-31-00
22	OIL PRESS ENG 2	P17-20	P10-19	1A36 E GND	PILOTS NO. 4-D&E	P15-2	79-31-00
23	OIL PRESS ENG 3	P17-20	P21-19	1A1 B GND	PILOTS NO. 4-D&E	P15-3	79-31-00
24	NACELLE NO. 1 OVHT	P17-21	P8-48	1A20-E POS	PILOTS NO. 4-D&E	P15-26	26-22-00
25	NACELLE NO. 2 OVHT	P17-21	P8-61	1A1-C POS	PILOTS NO. 4-D&E	P15-27	26-22-00
26	NACELLE NO. 3 OVHT	P17-21	P20-52	1A3-E POS	PILOTS NO. 4-D&E	P15-28	26-22-00
27	TURB AIR OVHT ENG 1	P17-20	P22-17	1A20-E POS	PILOTS NO. 4-D&E	P15-7	77-22-00
28	TURB AIR OVHT ENG 2	P17-20	P10-31	1A20-C POS	PILOTS NO. 4-D&E	P15-9	77-22-00
29	TURB AIR OVHT ENG 3	P17-20	P21-16	1A1-C POS	PILOTS NO. 4-D&E	P15-9	77-22-00
30	(SPARE)						
31	ENG 2 FAIL ARMED	P17-20	P8-31	1A29-1 POS	PILOTS NO. 2-B	P8-19	77-14-00
32	LOW BRAKE PRESSURE	P17-21	P10-1 & P10-15	1A3-E POS	PILOTS NO. 4-D&E	P15-29	32-46-00
33	RUDDER HYDR LMTR	P17-21	P7-52	1A34-D GND	PILOTS NO. 4-D&E	P15-33	22-17-00
34	RUDDER MECH LMTR	P17-21	P8-42	1A1-D GND	PILOTS NO. 4-D&E	P15-34	22-17-00
35	ROLL SPEED BRAKE	P17-21	P10-23	1A18-A GND	PILOTS NO. 4-D&E	P15-24	27-31-00
36	WHEEL WELL FIRE	P17-20	P18-48 & p18-46	1A3-D POS	PILOTS NO. 4-D&E	P15-16	23-11-00
37	VERTICAL GYRO 3	P17-21	P16-19	1A34-C POS	PILOTS NO. 4-D&E	P15-23	34-16-00
38	FLT CONT PANELS	P17-20	(A)	1A34-A,B,C,D,E,F	PILOTS NO. 4-D&E	P15-11	27-17-00
39	AUTO GND SPLRS INOP	P17-20	P8-18	1A36-D GND	PILOTS NO. 4-D&E	P15-6	22-17-00
		P17-20	P16-50	1A19-D GND	PILOTS NO. 4-D&E	P15-38	22-17-00
40	(SPARE)						
41	HYDRAULIC SYSTEM	P17-21	(A)	1A3-A,B,C,D,E,F	PILOTS NO. 4-D&E	P15-22	29-22-00
42	FUEL SYSTEM	P17-21	(A)	1A18 A,B,C	PILOTS NO. 4-D&E	P15-20	28-24-00
43	FIRE DET LOOP	P17-20	(A)	1A3-B,C,D	PILOTS NO. 4-D&E	P15-18	26-11-00
44	AREA/DUCT OVERHEAT	P17-20	(A)	1A20-B,C,D,E,F	PILOTS NO. 4-D&E	P15-13	36-22-00
45	ECS	P17-21	(A)	1A36-A,B,C,D	PILOTS NO. 4-D&E	P15-10	21-24-00
46	ENG VIB FLTR PRESS	P17-20	(A)	1A30-B,C,D,E	PILOTS NO. 4-D&E	P15-14	77-31-00
47	ELECTRICAL SYSTEM	P17-20	(A)	1A1-A,B	PILOTS NO. 4-D&E	P15-17	24-11-00
48	ESS/STBY POWER	P17-20	P8-27 &P10-14,-16,-18,-26	1A20-A,B POS	PILOTS NO. 4-D&E	P15-12	24-31-00
49	(SPARE)						
50	ICING	P17-21	P8-61	1A34-D POS	PILOTS NO. 4-D&E	P15-25	30-61-00
51	WINDSHIR COMPTR		P8-20	1A3 GND		P16-33	34-19-00
52	ANTI-SKID	P17-21	P7-41	1A34-D GND	PILOTS NO. 4-D&E	P15-21	32-44-00
53	BRAKE TEMP	P17-20	P10-12	1A34-D POS	PILOTS NO. 4-D&E	P15-15	32-45-00
54	DUAL A/L NOT AVAIL	P17-20	P8-11 & P10-11	1A36-C GND	PILOTS NO. 4-D&E	P15-5	27-13-00
55	RAT DEPLOYED	P17-21	P21-22	1A1-D GND	PILOTS NO. 4-D&E	P15-31	29-21-00
56	DOOR OPEN	P17-20	(A)	1A20-A,B,C,D,E	PILOTS NO. 4-D&E	P15-10	52-71-00
57	REVERSER OPERATING	P17-34	P8-55	1A27-12 POS	PILOTS NO. 1-B	P15-43	78-33-00
58	REVERSER IN TRANSIT	P17-35	P8-40	1A12-12 POS	PILOTS NO. 3-A1	P15-37	78-33-00
59	REVERSER OPERATING	P17-34	P10-9	1A27-6 POS	PILOTS NO. 1-B	P15-44	78-33-00
60	REVERSER IN TRANSIT	P17-35	P10-8	1A27-4 POS	PILOTS NO. 1-B	P15-38	78-33-00
61	REVERSER OPERATING	P17-34	P20-8	1A27-2 POS	PILOTS NO. 1-B	P15-45	78-33-00
62	REVERSER IN TRANSIT	P17-35	P10-7	1A12-19 POS	PILOTS NO. 1-B	P15-39	78-33-00
63	MAX IND RESET	P11-6	P11-6	1A2-C POS	PILOTS NO. 3-D	P7-16	31-12-00

NOTE

1. INPUTS ARE P5-2 (POS), P5-5 (POS), P5-23 (POS), P10-10 (POS), P10-27 (POS), P10-5 (POS), P10-3 (POS), P10-4 (POS), P20-2 (POS), P20-5 (POS), P21-21 (POS), P22-12 (POS)
2. INPUTS ARE P5-4 (POS), P5-6 (POS), P10-4 (POS), P10-5 (POS), P17-5 (POS), P17-6 (POS), P17-41 (POS), P17-42 (POS)
3. INPUTS ARE P7-48 (POS), P8-39 (GND), P8-44 (GND), P8-64 (GND), P10-13 (GND), P21-12 (GND), P22-4 (GND)
4. INPUTS ARE P8-1 (GND), P8-2 (GND), P8-5 (POS), P8-7 (POS), P8-8 (GND), P8-9 (GND), P8-12 (GND), P8-16 (POS), P8-17 (POS), P8-18 (GND), P8-19 (GND), P8-24 (GND), P8-25 (GND), P10-26 (GND), P10-30 (GND), P10-40 (GND), P10-41 (GND), P10-44 (GND), P10-47 (POS), P21-24 (GND), P21-30 (GND), P22-12 (GND), P22-22 (GND)
5. INPUTS ARE P8-1 (POS), P8-9 (POS), P8-12 (GND), P10-17 (GND), P10-38 (POS), P10-39 (POS), P18-1 (POS), P17-1 (POS), P10-10 (POS), P10-13 (GND), P10-27 (GND), P10-53 (POS), P20-8 (POS), P20-12 (GND), P21-14 (GND), P22-14 (GND)
6. INPUTS ARE P5-3 (POS), P6-30 (POS), P8-34 (POS), P8-37 (GND), P8-38 (POS), P8-42 (GND), P8-55 (POS), P18-2 (POS), P17-3 (POS), P18-24 (POS), P18-27 (POS), P18-39 (POS), P18-61 (GND), P18-63 (POS), P18-64 (POS), P18-66 (GND), P13-35 (GND), P20-22 (POS)
7. INPUTS ARE P8-10 (GND), P8-22 (GND), P8-23 (GND), P8-66 (GND), P8-65 (GND), P8-67 (GND), P8-6 (GND), P18-33 (GND), P18-49 (GND), P18-41 (GND), P18-42 (GND), P20-20 (GND), P20-38 (GND), P20-41 (GND), P20-47 (GND), P20-51 (GND), P22-26 (GND)
8. INPUTS ARE P8-12 (GND), P8-13 (GND), P8-16 (GND), P8-17 (GND), P8-18 (GND), P7-31 (POS), P7-32 (POS), P7-33 (POS), P7-34 (POS), P7-35 (POS), P7-36 (POS), P7-39 (POS), P7-40 (POS), P7-31 (POS), P7-33 (POS), P7-35 (GND), P18-12 (GND), P18-13 (GND), P18-16 (GND), P18-17 (GND), P18-18 (GND), P18-48 (GND), P18-60 (GND), P18-61 (GND), P18-62 (GND)

10 ON AIRCRAFT 001-030 WITHOUT MB 33-060

11 ON AIRCRAFT 001-031 WITHOUT SB 27-100

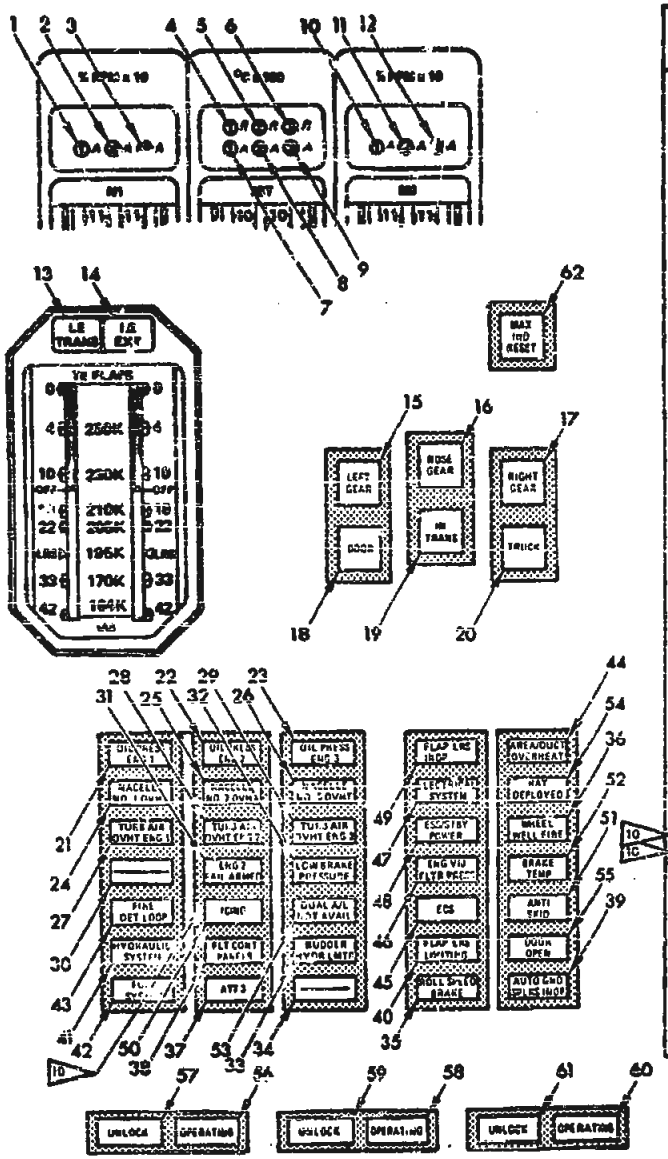
12 ON AIRCRAFT WITH SB34-170 ICING LEGEND HAS BEEN REPLACED AS SHOWN

M1-0011-33-035

R Indicator Signals - Pilots Center Instrument Panel
R Figure 112

EFFECTIVITY: 001-031

C078

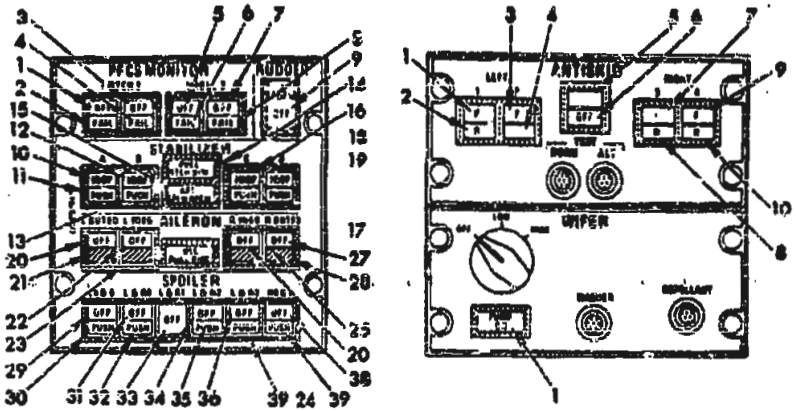


	LEGEND	BOX TEST INPUT CONN & PIN NO.	BOX SIGNAL INPUT CONN & PIN NO.	CARD DRIVER AND INPUT SIG	TEST RELAY TITLE & PINS	BOX OUTPUT CONN & PIN NO.	ATA REF.
1	(AMBER)	P5-24	P5-24	1A19-E POS	PILOTS NO. 1-A	P74	77-12-00
2	(AMBER)	P5-24	P5-24	1A19-E POS	PILOTS NO. 1-A	P74	77-12-00
3	(AMBER)	P5-24	P5-24	1A19-E POS	PILOTS NO. 1-A	P74	77-12-00
4	(RED	P5-24	P5-24	1A19-E POS	PILOTS NO. 1-A	P74	77-21-00
5	(RED)	P5-24	P5-24	1A19-E POS	PILOTS NO. 1-A	P74	77-21-00
6	(RED)	P5-24	P5-24	1A19-E POS	PILOTS NO. 1-A	P74	77-21-00
7	(AMBER)	P5-24	P5-24	1A19-E POS	PILOTS NO. 1-A	P74	77-21-00
8	(AMBER)	P5-24	P5-24	1A19-E POS	PILOTS NO. 1-A	P74	77-21-00
9	(AMBER)	P5-21	P5-24	1A19-E POS	PILOTS NO. 1-A	P75	77-21-00
10	(AMBER)	P5-24	P5-24	1A10-E POS	PILOTS NO. 1-A	P74	77-12-00
11	(AMBER)	P5-24	P5-24	1A19-E POS	PILOTS NO. 1-A	P74	77-12-00
12	(AMBER)	P5-24	P5-24	1A19-E POS	PILOTS NO. 1-A	P74	77-12-00
13	LE IN TRANS	P17-25	P5-28	1A29-3 POS	PILOTS NO. 1-C	P18-48	27-61-00
14	LE EXT	P17-25	P5-20	1A29-12 POS	PILOTS NO. 1-C	P5-17	27-61-00
15	LEFT GEAR	P17-27	P5-27	1A27-17 GND	PILOTS NO. 3-C	P18-50	32-61-00
16	NOSE GEAR	P17-27	P18-19	1A27-18 GND	PILOTS NO. 3-C	P18-48	32-61-00
17	RIGHT GEAR	P17-27	P20-19	1A27-18 GND	PILOTS NO. 3-C	P18-52	32-61-00
18	DOOR	P17-28	P18-24	1A5-11 POS	PILOTS NO. 1-C	P18-48	32-61-00
19	IN TRANS	P17-25	P18-20	1A12-18 POS	PILOTS NO. 1-C	P18-47	32-61-00
20	TRUCK	P17-25	P18-21	1A12-16 POS	PILOTS NO. 1-C	P18-51	32-61-00
21	OIL PRESS ENG 1	P17-20	P22-16	1A36-D GND	PILOTS NO. 4-D&E	P15-1	79-31-00
22	OIL PRESS ENG 2	P17-20	P10-19	1A36-E GND	PILOTS NO. 4-D&E	P15-2	79-31-00
23	OIL PRESS ENG 3	P17-20	P21-16	1A1-B GND	PILOTS NO. 4-D&E	P15-1	79-31-00
24	NACELLE NO. 1 OVHT	P17-21	P8-46	1A20-E POS	PILOTS NO. 4-D&E	P15-26	36-22-00
25	NACELLE NO. 2 OVHT	P17-21	P5-51	1A1-C POS	PILOTS NO. 4-D&E	P15-27	36-22-00
26	NACELLE NO. 3 OVHT	P17-21	P20-52	1A3-E POS	PILOTS NO. 4-D&E	P15-28	36-22-00
27	TURB AIR OVHT ENG 1	P17-20	P22-17	1A20-E POS	PILOTS NO. 4-D&E	P15-7	77-22-00
28	TURB AIR OVHT ENG 2	P17-20	P10-20	1A20-C POS	PILOTS NO. 4-D&E	P15-8	77-22-00
29	TURB AIR OVHT ENG 3	P17-20	P21-15	1A1-C POS	PILOTS NO. 4-D&E	P15-6	77-22-00
30	(SPARE)	P17-21	----	1A18	PILOTS NO. 4-D&E	P15-30	-------
31	ENG 2 FAIL ARMED	P17-30	P5-31	1A29-1 POS	PILOTS NO. 2-B	P5-18	77-14-00
32	LOW BRAKE PRESSURE	P17-21	P10-1 & P10-15	1A3-E POS	PILOTS NO. 4-D&E	P15-29	32-45-00
33	RUDDER HYDR LMTR	P17-21	P7-52	1A34-D GND	PILOTS NO. 4-D&E	P15-22	27-17-00
34	(SPARE)	P17-21	----	1A1-D GND	PILOTS NO. 4-D&E	P15-34	-------
35	ROLL SPEED BRAKE	P17-21	P18-23	1A18-A GND	PILOTS NO. 4-D&E	P15-24	27-61-00
36	WHEEL WELL FIRE	P17-20	P18-45 & p18-46	1A3-D POS	PILOTS NO. 4-D&E	P15-18	26-11-00
37	ATT 3	P17-21	P18-19	1A34-C POS	PILOTS NO. 4-D&E	P15-23	34-18-00
38	FLT CONT PANELS	P17-20	(9)	1A34-A,B,C,D,E,F	PILOTS NO. 4-D&E	P15-11	27-17-00
39	AUTO GND SPLRS INOP	P17-20	P5-10	1A29-D GND	PILOTS NO. 4-D&E	P15-6	27-17-00
40	FLAP LRS LIMITING	P17-21	P10-59	1A18-E GND	PILOTS NO. 4-D&E	P15-35	27-61-00
41	HYDRAULIC SYSTEM	P17-21	(6)	1A3-A,B,C,D,E,F	PILOTS NO. 4-D&E	P15-22	29-32-00
42	FUEL SYSTEM	P17-21	(3)	1A18-A,B,C	PILOTS NO. 4-D&E	P15-20	28-24-00
43	FIRE DET LOOP	P17-20	(2)	1A3-B,C,D	PILOTS NO. 4-D&E	P15-18	26-11-00
44	AREA/DUCT OVERHEAT	P17-20	(1)	1A20-B,C,D,E,F	PILOTS NO. 4-D&E	P15-13	36-22-00
45	ECS	P17-21	(7)	1A36-A,B,C,D	PILOTS NO. 4-D&E	P15-19	21-24-00
46	ENG VIB FLTR PRESS	P17-20	(4)	1A35-B,C,D,E	PILOTS NO. 4-D&C	P15-14	77-31-00
47	ELECTRICAL SYSTEM	P17-20	(5)	1A1-A,B	PILOTS NO. 4-D&E	P15-17	24-11-00
48	ESS/STBY POWER	P17-20	P5-27 &P18-14,-15,-19,-25	1A20-A,B POS	PILOTS NO. 4-D&E	P15-12	24-31-00
49	FLAP LRS INOP	P17-20	P5-20	1A3-F GND	PILOTS NO. 4-D&E	P15-4	34-34-00
50	ICING	P17-21	P5-51	1A34-D POS	PILOTS NO. 4-D&E	P15-25	30-61-00
50	WINDSHR COMPTR		P5-20	1A3 GND		P15-33	34-19-00
51	ANTI-SKID	P17-21	P7-41	1A34-D GND	PILOTS NO. 4-D&E	P15-31	32-44-00
52	BRAKE TEMP	P17-20	P18-12	1A34-D POS	PILOTS NO. 4-D&E	P15-15	32-45-00
53	DUAL A/L NOT AVAIL	P17-20	P8-11 & P10-11	1A35-C GND	PILOTS NO. 4-D&E	P15-6	32-13-00
54	RAT DEPLOYED	P17-21	P21-22	1A1-D GND	PILOTS NO. 4-D&E	P15-31	29-21-00
55	DOOR OPEN	P17-20	(8)	1A20-A,B,C,D,E	PILOTS NO. 4-D&E	P15-10	52-71-00
56	REVERSER OPERATING	P17-24	P8-50	1A27-12 POS	PILOTS NO. 1-B	P18-43	78-30-00
57	REVERSER UNLOCK	P17-25	P8-49	1A12-12 POS	PILOTS NO. 3-A1	P15-37	78-30-00
58	REVERSER OPERATING	P17-24	P8-9	1A27-9 POS	PILOTS NO. 1-B	P15-44	78-30-00
59	REVERSER UNLOCK	P17-24	P18-8	1A27-6 POS	PILOTS NO. 1-B	P15-28	78-30-00
60	REVERSER OPERATING	P17-24	P20-8	1A27-2 POS	PILOTS NO. 1-B	P18-48	78-30-00
61	REVERSER UNLOCK	P17-24	P20-7	1A12-13 POS	PILOTS NO. 1-B	P15-39	78-30-00
62	MAX IND RESET	P11-6	P11-6	1A2-C POS	PILOTS NO. 3-D	P7-16	77-12-00

NOTE

1. INPUTS ARE P8-2 (POS), P8-3 (POS), P8-50 (POS), P18-46 (POS), P18-27 (POS), P18-2 (POS), P18-3 (POS), P18-4 (POS), P18-5 (POS), P20-5 (POS), P21-21 (POS), P22-42 (POS)
2. INPUTS ARE P8-4 (POS), P8-5 (POS), P18-4 (POS), P18-5 (POS), P18-6 (POS), P74 (POS), P176 (POS), P17-41 (POS), P17-42 (POS)
3. INPUTS ARE P10-14 (GND), P18-54 (POS), P18-35 (POS), P18-42 (POS), P18-43 (POS), P17-45 (POS), P17-46 (POS), P18-16 (POS), P18-46 (POS), P21-13 (GND), P22-6 (GND), P22-47 (POS), P22-48 (POS)
4. INPUTS ARE P7-46 (POS), P8-39 (GND), P8-44 (GND), P8-54 (GND), P10-13 (GND), P21-12 (GND), P22-4 (GND)
5. INPUTS ARE P8-1 (GND), P8-2 (GND), P8-5 (POS), P8-7 (POS), P8-8 (GND), P8-9 (GND), P8-12 (GND), P8-16 (POS), P8-17 (POS), P8-18 (GND), P8-19 (GND), P8-22 (GND), P8-24 (GND), P8-26 (GND), P10-16 (GND), P10-38 (GND), P10-39 (GND), P10-40 (GND), P18-41 (GND), P18-44 (GND), P18-47 (GND), P21-24 (GND), P21-38 (GND), P22-13 (GND), P22-23 (GND)
6. INPUTS ARE P8-1 (POS), P8-6 (POS), P8-12 (GND), P10-17 (GND), P10-34 (POS), P10-35 (POS), P18-2 (POS), P17-1 (POS), P18-10 (POS), P18-13 (GND), P18-27 (GND), P18-53 (POS), P20-5 (POS), P20-12 (GND), P21-14 (GND), P22-14 (GND)
7. INPUTS ARE P5-5 (POS), P8-30 (POS), P8-34 (P22), P8-37 (GND), P8-38 (POS), P8-42 (GND), P8-50 (POS), P18-3 (POS), P17-3 (POS), P18-24 (POS), P18-37 (POS), P18-38 (POS), P18-61 (GND), P18-63 (POS), P18-64 (POS), P18-66 (GND), P18-38 (GND), P20-46 (POS)
8. INPUTS ARE P8-10 (GND), P8-32 (GND), P8-33 (GND), P8-66 (GND), P8-68 (GND), P8-67 (GND), P8-81 (GND), P18-39 (GND), P18-40 (GND), P18-61 (GND), P18-62 (GND), P18-63 (GND), P20-39 (GND), P20-47 (GND), P20-61 (GND), P22-38 (GND)
9. INPUTS ARE P5-12 (GND), P8-13 (GND), P8-18 (GND), P8-17 (GND), P8-18 (GND), P7-19 (GND), P7-20 (POS), P7-21 (POS), P7-22 (POS), P7-23 (POS), P7-24 (POS), P7-25 (POS), P7-28 (POS), P7-29 (POS), P7-30 (POS), P7-31 (POS), P7-32 (GND), P7-38 (GND), P18-12 (GND), P18-13 (GND), P18-16 (GND), P18-17 (GND), P18-18 (GND), P18-48 (GND), P18-60 (GND), P18-61 (GND), P18-62 (GND), P18-80 (GND)
10. ON AIRCRAFT WITH EB36-178 ICING LEGEND HAS BEEN REPLACED AS SHOWN

Indicator Signals - Pilots Center Instrument Panel
Figure 112



CAPTAINS COMPASS PANEL							
IND NO.	LEGEND	BOX TEST INPUT CONN & PIN NO.	BOX SIGNAL INPUT CONN & PIN NO.	CARD DRIVER AND INPUT SIG	TEST RELAY TITLE & PINS	BOX OUTPUT CONN & PIN NO.	ATA REF.
1	MAG	P11-5	P11-5	1A2-C POS	PILOTS NO. 3-D	P7-16	34-22-00
2	DG	P11-6	P11-6	1A2-C POS	PILOTS NO. 3-D	P7-16	34-22-00

ANTISKID PANEL							
IND NO.	LEGEND	BOX TEST INPUT CONN & PIN NO.	BOX SIGNAL INPUT CONN & PIN NO.	CARD DRIVER AND INPUT SIG	TEST RELAY TITLE & PINS	BOX OUTPUT CONN & PIN NO.	ATA REF.
1	F	P14-15	P14-15	1A35-E POS	PILOTS NO. 4-C	P7-40	32-44-00
2	R	P14-15	P14-15	1A35-E POS	PILOTS NO. 4-C	P7-40	32-44-00
3	F	P14-15	P14-15	1A35-E POS	PILOTS NO. 4-C	P7-40	32-44-00
4	R	P14-15	P14-15	1A35-E POS	PILOTS NO. 4-C	P7-40	32-44-00
5	ON	P14-15	P14-15	1A35-E POS	PILOTS NO. 4-C	P7-40	32-44-00
6	OFF	P14-15	P14-15	1A35-E POS	PILOTS NO. 4-C	P7-40	32-44-00
7	F	P14-15	P14-15	1A35-E POS	PILOTS NO. 4-C	P7-40	32-44-00
8	R	P14-15	P14-15	1A35-E POS	PILOTS NO. 4-C	P7-40	32-44-00
9	F	P14-15	P14-15	1A35-E POS	PILOTS NO. 4-C	P7-40	32-44-00
10	R	P14-15	P14-15	1A35-E POS	PILOTS NO. 4-C	P7-40	32-44-00

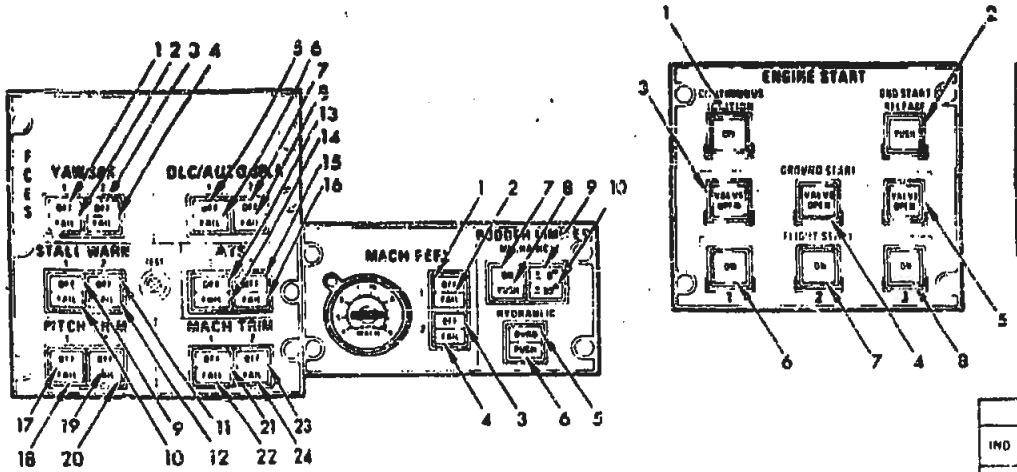
CAPTAINS WIPER PANEL							
IND NO.	LEGEND	BOX TEST INPUT CONN & PIN NO.	BOX SIGNAL INPUT CONN & PIN NO.	CARD DRIVER AND INPUT SIG	TEST RELAY TITLE & PINS	BOX OUTPUT CONN & PIN NO.	ATA REF.
1	PUMP ON	P17-29	P6-29	1A14-1 POS	PILOTS NO. 2-A	P11-46	30-43-00

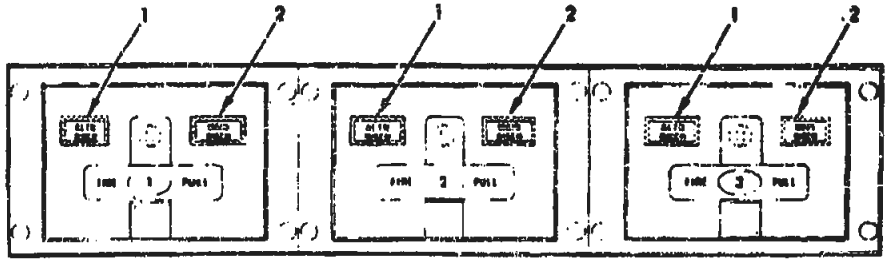
EXTERIOR LIGHTS PANEL							
IND NO.	LEGEND	BOX TEST INPUT CONN & PIN NO.	BOX SIGNAL INPUT CONN & PIN NO.	CARD DRIVER AND INPUT SIG	TEST RELAY TITLE & PINS	BOX OUTPUT CONN & PIN NO.	ATA REF.
1	OFF	P11-5	P11-5	1A2-C POS	PILOTS NO. 3-D	P7-16	33-44-00
2	OFF	P11-5	P11-5	1A2-C POS	PILOTS NO. 3-D	P7-16	33-41-00
3	OFF	P11-5	P11-5	1A2-C POS	PILOTS NO. 3-D	P7-16	33-41-00
4	ON	P11-5	P11-5	1A2-C POS	PILOTS NO. 3-D	P7-16	33-46-00
5	ON	P11-6	P11-6	1A2-C POS	PILOTS NO. 3-D	P7-16	33-39-00
6	UNARM	P17-31	P7-1	1A27-20 GND	PILOTS NO. 2-C	P11-16	33-61-00

PFCS MONITOR PANEL							
IND NO.	LEGEND	BOX TEST INPUT CONN & PIN NO.	BOX SIGNAL INPUT CONN & PIN NO.	CARD DRIVER AND INPUT SIG	TEST RELAY TITLE & PINS	BOX OUTPUT CONN & PIN NO.	ATA REF.
1	OFF	P11-38	P11-38	1A19-C POS	PILOTS NO. 2-F	P7-16	22-17-00
2	FAIL	P11-39	P11-39	1A19-C POS	PILOTS NO. 2-F	P7-16	22-17-00
3	OFF	P11-38	P11-38	1A19-C POS	PILOTS NO. 2-F	P7-16	22-17-00
4	FAIL	P11-39	P11-39	1A19-C POS	PILOTS NO. 2-F	P7-16	22-17-00
5	OFF	P11-38	P11-38	1A19-C POS	PILOTS NO. 2-F	P7-16	22-17-00
6	FAIL	P11-39	P11-39	1A19-C POS	PILOTS NO. 2-F	P7-16	22-17-00
7	OFF	P11-38	P11-38	1A19-C POS	PILOTS NO. 2-F	P7-16	22-17-00
8	FAIL	P11-39	P11-39	1A19-C POS	PILOTS NO. 2-F	P7-16	22-17-00
9	OFF	P11-38	P11-38	1A19-C POS	PILOTS NO. 2-F	P7-16	22-17-00
10	INOP	P11-38	P11-38	1A19-C POS	PILOTS NO. 2-E	P7-16	22-17-00
11	PUSH	P11-38	P11-38	1A19-C POS	PILOTS NO. 2-E	P7-16	22-17-00
12	INOP	P11-38	P11-38	1A19-C POS	PILOTS NO. 2-E	P7-16	22-17-00
13	PUSH	P11-39	P11-39	1A19-C POS	PILOTS NO. 2-E	P7-16	22-17-00
14	PULL PITCH DISC	P11-38	P11-39	1A19-C POS	PILOTS NO. 2-F	P7-16	22-17-00
15	AFT CPLR OPEN	P11-39	P11-38	1A19-C POS	PILOTS NO. 2-F	P7-16	22-17-00
16	INOP	P11-38	P11-38	1A19-C POS	PILOTS NO. 2-F	P7-16	22-17-00
17	PUSH	P11-38	P11-38	1A19-C POS	PILOTS NO. 2-F	P7-16	22-17-00
18	INOP	P11-38	P11-38	1A19-C POS	PILOTS NO. 2-F	P7-16	22-17-00
19	PUSH	P11-38	P11-38	1A19-C POS	PILOTS NO. 2-E	P7-16	22-17-00
20	OFF	P11-38	P11-38	1A19-C POS	PILOTS NO. 2-F	P7-16	22-17-00
21	CROSS HATCH	P11-38	P11-38	1A19-C POS	PILOTS NO. 2-F	P7-16	22-17-00
22	OFF	P11-38	P11-38	1A19-C POS	PILOTS NO. 2-F	P7-16	22-17-00
23	CROSS HATCH	P11-38	P11-38	1A19-C POS	PILOTS NO. 2-F	P7-16	22-17-00
24	PULL ROLL DISC	P11-38	P11-38	1A19-C POS	PILOTS NO. 2-F	P7-16	22-17-00
25	OFF	P11-38	P11-38	1A19-C POS	PILOTS NO. 2-F	P7-16	22-17-00
26	CROSS HATCH	P11-38	P11-38	1A19-C POS	PILOTS NO. 2-F	P7-16	22-17-00
27	OFF	P11-38	P11-38	1A19-C POS	PILOTS NO. 2-F	P7-16	22-17-00
28	CROSS HATCH	P11-38	P11-38	1A19-C POS	PILOTS NO. 2-F	P7-16	22-17-00
29	OFF	P11-38	P11-38	1A19-C POS	PILOTS NO. 2-E	P7-16	22-17-00
30	PUSH	P11-38	P11-38	1A19-C POS	PILOTS NO. 2-E	P7-16	22-17-00
31	OFF	P11-38	P11-38	1A19-C POS	PILOTS NO. 2-E	P7-16	22-17-00
32	PUSH	P11-38	P11-38	1A19-C POS	PILOTS NO. 2-E	P7-16	22-17-00
33	OFF	P11-38	P11-38	1A19-C POS	PILOTS NO. 2-F	P7-16	22-17-00
34	OFF	P11-38	P11-38	1A19-C POS	PILOTS NO. 2-F	P7-16	22-17-00
35	PUSH	P11-38	P11-38	1A19-C POS	PILOTS NO. 2-F	P7-16	22-17-00
36	OFF	P11-38	P11-38	1A19-C POS	PILOTS NO. 2-F	P7-16	22-17-00
37	PUSH	P11-38	P11-38	1A19-C POS	PILOTS NO. 2-F	P7-16	22-17-00
38	OFF	P11-38	P11-38	1A19-C POS	PILOTS NO. 2-F	P7-16	22-17-00
39	PUSH	P11-38	P11-38	1A19-C POS	PILOTS NO. 2-F	P7-16	22-17-00

M1-329C3-33-701

Indicator Signals - PFCS Monitor, Anti-Skid, Wiper Exterior Lights and Compass (Captains) Panels
Figure 113




1 2
1 2
1 2
ENG 1 OVERHEAD FIRE EXTINGUISHER PANEL
ENG 2 OVERHEAD FIRE EXTINGUISHER PANEL
ENG 3 OVERHEAD FIRE EXTINGUISHER PANEL

ENGINE 1 OVERHEAD FIRE EXTINGUISHER PANEL							
IND NO.	LEGEND	BOX TEST INPUT CONN & PIN NO.	BOX SIGNAL INPUT CONN & PIN NO.	CARD DRIVER AND INPUT SIG	TEST RELAY TITLE & PINS	BOX OUTPUT CONN & PIN NO.	ATA REF
1	ALTN DISCH	P17-19	P22-9	1A14-23 GND	PILOTS NO. 4C	P11-2	26-21-00
2	MAIN DISCH	P17-19	P22-8	1A14-70 GND	PILOTS NO. 4C	P11-1	26-21-00

FLT CONTROL (MACH FEEL/RUDDER LIMITER) PANEL							
IND NO.	LEGEND	BOX TEST INPUT CONN & PIN NO	BOX SIGNAL INPUT CONN & PIN NO.	CARD DRIVER AND INPUT SIG	TEST RELAY TITLE & PINS	BOX OUTPUT CONN & PIN NO.	ATA REF.
1	OFF	P14-1	P14-1	1A35 C POS	PILOTS NO 1D	P8-42	22 21 00
2	FAIL	P14-1	P14-1	1A35-C POS	PILOTS NO 1D	P8-42	22 21 00
3	OFF	P14-1	P14-1	1A35 C POS	PILOTS NO 1D	P8-42	22 21 00
4	FAIL	P14-1	P14-1	1A35 C POS	PILOTS NO 1D	P8-42	22 21-00
5	OVRD	P14-1	P14 1	1A35 C POS	PILOTS NO 1D	P8 42	22 10-00
6	PUSH	P14-1	P14-1	1A35-C POS	PILOTS NO 1D	P8-42	22 10-00
7	ON	P14-1	P14-1	1A35-C POS	PILOTS NO 1D	P8-42	22 10-00
8	PUSH	P14-1	P14-1	1A35 C POS	PILOTS NO 1D	P8 42	22 10-00
9	< 80	P14-1	P14-1	1A35 C POS	PILOTS NO 1D	P8-42	22-10-00
10	< 300	P14-1	P14-1	1A35-C POS	PILOTS NO. 1D	P8-42	22 10-00

ENGINE START PANEL							
IND NO.	LEGEND	BOX TEST INPUT CONN & PIN NO.	BOX SIGNAL INPUT CONN & PIN NO.	CARD DRIVER AND INPUT SIG	TEST RELAY TITLE & PINS	BOX OUTPUT CONN & PIN NO.	ATA REF
1	ON	P17 28	P7 44	1A14-15 POS	PILOTS NO 2A	P11 58	80-11-00
2	PUSH	P17 28	P7 45	1A14-16 POS	PILOTS NO. 2A	P11 57	80-11-00
3	VALVE OPEN	P17 29	P22 15	1A8-16 POS	PILOTS NO. 2A	P11 11	80-11-00
4	VALVE OPEN	P17 29	P10-18	1A14-13 POS	PILOTS NO 2A	P11 81	80-11-00
5	VALVE OPEN	P17 28	P16-21	1A14 14 POS	PILOTS NO 2A	P11 32	80-11-00
6	ON	P17 28	P7 36	1A14-6 POS	PILOTS NO. 2A	P11 12	80 11 00
7	ON	P17 29	P7 18	1A14-2 POS	PILOTS NO. 2A	P11 26	80 11 00
8	ON	P17 29	P7 37	1A14-6 POS	PILOTS NO. 2A	P11 56	80 11 00

ENG 2 OVERHEAD FIRE EXTINGUISHER PANEL							
IND NO.	LEGEND	BOX TEST INPUT CONN & PIN NO	BOX SIGNAL INPUT CONN & PIN NO.	CARD DRIVER AND INPUT SIG	TEST RELAY TITLE & PINS	BOX OUTPUT CONN & PIN NO.	ATA REF
1	ALTN DISCH	P17 19	P10 19	1A14-24 GND	PILOTS NO. 4C	P11-60	26-21-00
2	MAIN DISCH	P17 19	P10 8	1A14 23 GND	PILOTS NO. 4C	P11-59	26-21-00

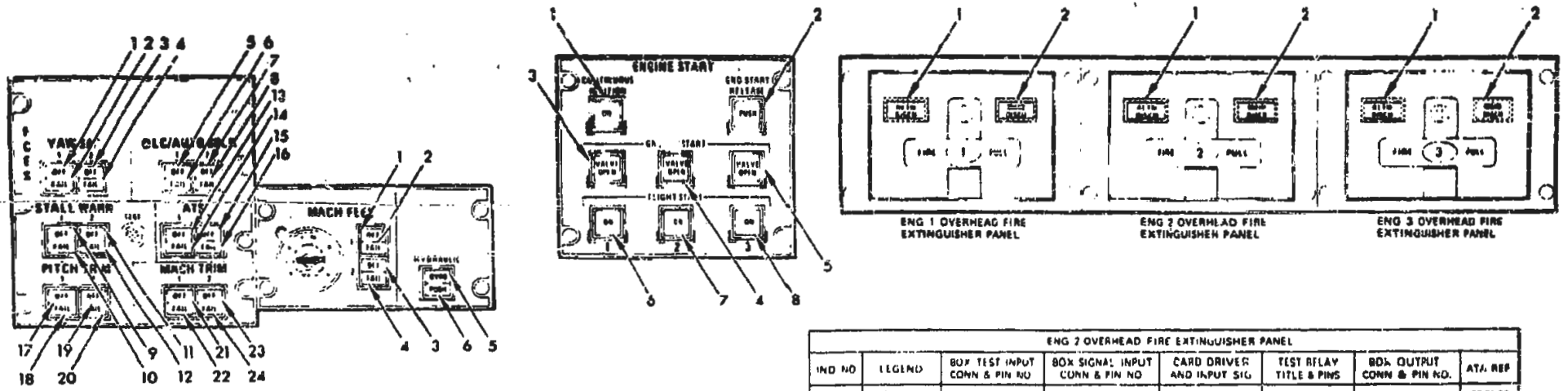
ENG 3 OVERHEAD FIRE EXTINGUISHER PANEL							
IND NO	LEGEND	BOX TEST INPUT CONN & PIN NO	BOX SIGNAL INPUT CONN & PIN NO.	CARD DRIVER AND INPUT SIG	TEST RELAY TITLE & PINS	BOX OUTPUT CONN & PIN NO.	ATA REF.
1	ALTN DISCH	P17 22	P21-7	1A9 24 GND	PILOTS NO. 4F	P11-37	26-21-00
2	MAIN DISCH	P17 22	P21 6	1A9 23 GND	PILOTS NO 4F	P11-36	26 21 00

FCES PANEL							
IND NO.	LEGEND	BOX TEST INPUT CONN & PIN NO	BOX SIGNAL INPUT CONN & PIN NO.	CARD DRIVER AND INPUT SIG	TEST RELAY TITLE & PINS	BOX OUTPUT CONN & PIN NO.	ATA REF.
1	OFF	P14-1	P14-1	1A35 C POS	PILOTS NO. 1E	P8-42	22-16-00
2	FAIL	P14-1	P14-1	1A35 C POS	PILOTS NO. 1E	P8-42	22-16-00
3	OFF	P14-1	P14-1	1A35 C POS	PILOTS NO 1E	P8-42	22-16-00
4	FAIL	P14-1	P14-1	1A35 C POS	PILOTS NO 1E	P8-42	22-16-00
5	OFF	P14-1	P14-1	1A35 C POS	PILOTS NO 1E	P8-42	22-17-00
6	FAIL	P14-1	P14-1	1A35 C POS	PILOTS NO. 1E	P8-42	22-17-00
7	OFF	P14-1	P14-1	1A35 C POS	PILOTS NO 1E	P8-42	22-17-00
8	FAIL	P14-1	P14-1	1A35 C POS	PILOTS NO. 1E	P8-42	22-17-00
9	OFF	P14-1	P14-1	1A35 C POS	PILOTS NO 1E	P8-42	22-17-00
10	FAIL	P14-1	P14-1	1A35 C POS	PILOTS NO. 1E	P8-42	22-17-00
11	OFF	P14-1	P14-1	1A35 C POS	PILOTS NO. 1E	P8-42	22-17-00
12	FAIL	P14-1	P14-1	1A35 C POS	PILOTS NO. 1E	P8-42	22-17-00
13	OFF	P14-1	P14-1	1A35 C POS	PILOTS NO. 1E	P8-42	22-21-00
14	FAIL	P14-1	P14-1	1A35 C POS	PILOTS NO. 1E	P8-42	22-21-00
15	OFF	P14-1	P14-1	1A35 C POS	PILOTS NO 1E	P8-42	22-21-00
16	FAIL	P14-1	P14-1	1A35 C POS	PILOTS NO. 1E	P8-42	22-21-00
17	OFF	P14-1	P14-1	1A35 C POS	PILOTS NO 1E	P8-42	22-19-00
18	FAIL	P14-1	P14-1	1A35-C POS	PILOTS NO. 1E	P8-42	22-19-00
19	OFF	P14-1	P14-1	1A35 C POS	PILOTS NO. 1E	P8-42	22-19-00
20	FAIL	P14-1	P14-1	1A35 C POS	PILOTS NO. 1E	P8-42	22-19-00
21	OFF	P14-1	P14-1	1A35 C POS	PILOTS NO. 1E	P8-42	22-19-00
22	FAIL	P14-1	P14-1	1A35 C POS	PILOTS NO. 1E	P8-42	22-19-00
23	OFF	P14-1	P14-1	1A35 C POS	PILOTS NO. 1E	P8-42	22-19-00
24	FAIL	P14-1	P14-1	1A35 C POS	PILOTS NO 1E	P8-42	22-19-00

M1-0030-33-804

Indicator Signals - FCES, Flight Control, Engine Start, and Engine Fire Extinguisher Panels
Figure 114

R EFFECTIVITY: 001-017 WITHOUT SB27-169
R
0075



ENGINE 1 OVERHEAD FIRE EXTINGUISHER PANEL							
IND NO.	LEGEND	BOX TEST INPUT CONN & PIN NO.	BOX SIGNAL INPUT CONN & PIN NO.	CARD DRIVER AND INPUT SIG	TEST RELAY TITLE & PINS	BOX OUTPUT CONN & PIN NO.	ATA REF
1	ALTN DISCH	P17-19	P22-8	1A14-22 GND	PILOTS NO 4C	P11-2	26-21-00
2	MAIN DISCH	P17-19	P22-6	1A14-20 GND	PILOTS NO 4C	P11-1	26-21-00

FLT CONTROL (MACH FEEL RUDDER LIMITER) PANEL							
IND NO.	LEGEND	BOX TEST INPUT CONN & PIN NO	BOX SIGNAL INPUT CONN & PIN NO	CARD DRIVER AND INPUT SIG	TEST RELAY TITLE & PINS	BOX OUTPUT CONN & PIN NO.	ATA REF
1	OFF	P16-1	P16-1	1A35 C POS	PILOTS NO 1D	P6-42	22 21-00
2	FAIL	P16-1	P16-1	1A35 C POS	PILOTS NO 1D	P6-42	22 21-00
3	OFF	P16-1	P16-1	1A35 C POS	PILOTS NO 1D	P6-42	22 21-00
4	FAIL	P16-1	P16-1	1A35 C POS	PILOTS NO 1D	P6-42	22 21-00
5	OVRD	P16-1	P16-1	1A36 C POS	PILOTS NO 1D	P6-42	22 10-00
6	PUSH	P16-1	P16-1	1A36 C POS	PILOTS NO 1D	P6-42	22 10-00

ENGINE START PANEL							
IND NO	LEGEND	BOX TEST INPUT CONN & PIN NO	BOX SIGNAL INPUT CONN & PIN NO	CARD DRIVER AND INPUT SIG	TEST RELAY TITLE & PINS	BOX OUTPUT CONN & PIN NO	ATA REF
1	ON	P17 20	P7 44	1A14-15 POS	PILOTS NO. 2A	P11 58	80-11-00
2	PUSH	P17 20	P7 48	1A14-16 POS	PILOTS NO. 2A	P11 57	80 11 00
3	VALVE OPEN	P17 20	P22 16	1A8-18 POS	PILOTS NO 2A	P11 11	80 11 00
4	VALVE OPEN	P17 20	P10 18	1A14-13 POS	PILOTS NO. 2A	P11 61	80-11 00
5	VALVE OPEN	P17 20	P10-21	1A14-14 POS	PILOTS NO 2A	P11 32	80-11 00
6	ON	P17 20	P7 36	1A14-8 POS	PILOTS NO 2A	P11 13	80-11-00
7	ON	P17 20	P7 18	1A14-7 POS	PILOTS NO 2A	P11 36	80 11-00
8	ON	P17 20	P7 32	1A14-6 POS	PILOTS NO 2A	P11 56	80 11 00

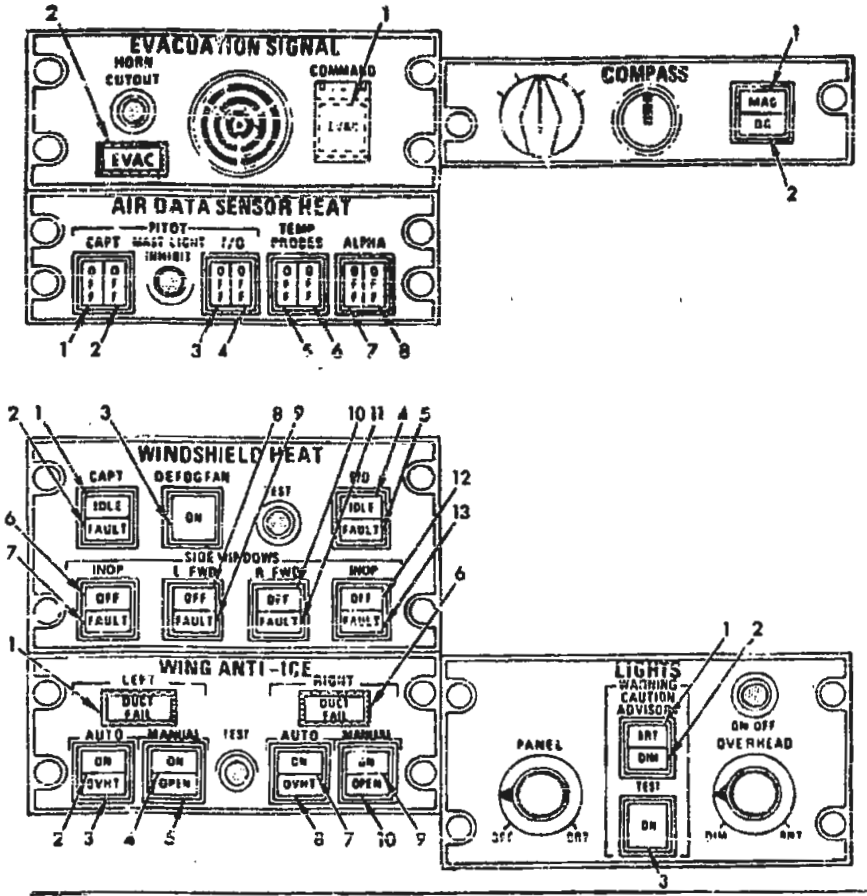
ENG 2 OVERHEAD FIRE EXTINGUISHER PANEL							
IND NO	LEGEND	BOX TEST INPUT CONN & PIN NO	BOX SIGNAL INPUT CONN & PIN NO	CARD DRIVER AND INPUT SIG	TEST RELAY TITLE & PINS	BOX OUTPUT CONN & PIN NO.	ATA REF
1	ALTN DISCH	P17 19	P10 10	1A14-24 GND	PILOTS NO. 4C	P11-60	26-21-00
2	MAIN DISCH	P17 19	P10 9	1A14 23 GND	PILOTS NO 4C	P11-58	26-21-00

ENG 3 OVERHEAD FIRE EXTINGUISHER PANEL							
IND NO	LEGEND	BOX TEST INPUT CONN & PIN NO	BOX SIGNAL INPUT CONN & PIN NO	CARD DRIVER AND INPUT SIG	TEST RELAY TITLE & PINS	BOX OUTPUT CONN & PIN NO.	ATA REF.
1	ALTN DISCH	P17 22	P21-7	1A9 24 GND	PILOTS NO 4F	P11-37	26-21-00
2	MAIN DISCH	P17 22	P21 6	1A9 23 GND	PILOTS NO 4F	P11-36	26 21 00

FCES PANEL							
IND NO	LEGEND	BOX TEST INPUT CONN & PIN NO	BOX SIGNAL INPUT CONN & PIN NO	CARD DRIVER AND INPUT SIG	TEST RELAY TITLE & PINS	BOX OUTPUT CONN & PIN NO	ATA REF.
1	OFF	P14-1	P14-1	1A35 C POS	PILOTS NO. 1E	P6-42	22-15-00
2	FAIL	P14-1	P14-1	1A35 C POS	PILOTS NO. 1E	P6-42	22-15-00
3	OFF	P14-1	P14-1	1A35 C POS	PILOTS NO 1E	P6-42	22-15-00
4	FAIL	P14-1	P14-1	1A35 C POS	PILOTS NO 1E	P6-42	22-15-00
5	OFF	P14-1	P14-1	1A35 C POS	PILOTS NO 1E	P6-42	22-17-00
6	FAIL	P14-1	P14-1	1A35 C POS	PILOTS NO. 1E	P6-42	22-17-00
7	OFF	P14-1	P14-1	1A35 C POS	PILOTS NO. 1E	P6-42	22-17-00
8	FAIL	P14-1	P14-1	1A35 C POS	PILOTS NO. 1E	P6-42	22-17-00
9	OFF	P14-1	P14-1	1A35 C POS	PILOTS NO 1E	P6-42	22-17-00
10	FAIL	P14-1	P14-1	1A35 C POS	PILOTS NO. 1E	P6-42	22-17-00
11	OFF	P14-1	P14-1	1A35 C POS	PILOTS NO 1E	P6-42	22-17-00
12	FAIL	P14-1	P14-1	1A35 C POS	PILOTS NO. 1E	P6-42	22-17-00
13	OFF	P14-1	P14-1	1A36 C POS	PILOTS NO. 1E	P6-42	22-31-00
14	FAIL	P14-1	P14-1	1A36 C POS	PILOTS NO 1E	P6-42	22-31-00
15	OFF	P14-1	P14-1	1A35 C POS	PILOTS NO 1E	P6-42	22-31-00
16	FAIL	P14-1	P14-1	1A36 C POS	PILOTS NO. 1E	P6-42	22-31-00
17	OFF	P14-1	P14-1	1A35 C POS	PILOTS NO. 1E	P6-42	22-18-00
18	FAIL	P14-1	P14-1	1A36 C POS	PILOTS NO. 1E	P6-42	22-18-00
19	OFF	P14-1	P14-1	1A36 C POS	PILOTS NO. 1E	P6-42	22-18-00
20	FAIL	P14-1	P14-1	1A36 C POS	PILOTS NO. 1E	P6-42	22-18-00
21	OFF	P14-1	P14-1	1A35 C POS	PILOTS NO. 1E	P6-42	22-19-00
22	FAIL	P14-1	P14-1	1A35 C POS	PILOTS NO. 1E	P6-42	22-19-00
23	OFF	P14-1	P14-1	1A36 C POS	PILOTS NO. 1E	P6-42	22-18-00
24	FAIL	P14-1	P14-1	1A36 C POS	PILOTS NO. 1E	P6-42	22-18-00

M1-0080-33-805

Indicator Signals - FCES, Flight Control, Engine Start, and Engine Fire Extinguisher Panels
Figure 114



EVACUATION SIGNAL PANEL							
IND NO.	LEGEND	BOX TEST INPUT CONN & PIN NO.	BOX SIGNAL INPUT CONN & PIN NO.	CARD DRIVER AND INPUT SIG	TEST RELAY TITLE & PINS	BOX OUTPUT CONN & PIN NO.	ATA REF.
1	EVAC	P17-29	P7-38	1A12-14 POS	PILOTS NO. 2 A PILOTS NO. 2 ABC	P11-34	25-62-00 25-62-00
2	EVAC	----	----	----	----	----	----

FIRST OFFICERS COMPASS PANEL							
IND NO.	LEGEND	BOX TEST INPUT CONN & PIN NO.	BOX SIGNAL INPUT CONN & PIN NO.	CARD DRIVER AND INPUT SIG	TEST RELAY TITLE & PINS	BOX OUTPUT CONN & PIN NO.	ATA REF.
1	MAG	P11-6	P11-5	1A2-C POS	PILOTS NO. 3D	P7-16	34-22-00
2	DG	P11-8	P11-5	1A2-C POS	PILOTS NO 3D	P7-16	34-22-00

AIR DATA SENSOR HEAT PANEL							
IND NO.	LEGEND	BOX TEST INPUT CONN & PIN NO.	BOX SIGNAL INPUT CONN & PIN NO.	CARD DRIVER AND INPUT SIG	TEST RELAY TITLE & PINS	BOX OUTPUT CONN & PIN NO.	ATA REF.
1	OFF	P11-38	P11-38	1A18-C POS	PILOTS NO. 2-D	P7-14	30-31-00
2	OFF	P11-38	P11-38	1A19-C POS	PILOTS NO. 2-D	P7-14	30-31-00
3	OFF	P11-38	P11-38	1A19-C POS	PILOTS NO. 2-D	P7-14	30-31-00
4	OFF	P11-38	P11-38	1A19-C POS	PILOTS NO. 2-D	P7-14	30-31-00
5	OFF	P11-38	P11-38	1A19-C POS	PILOTS NO. 2-D	P7-14	30-31-00
6	OFF	P11-38	P11-38	1A19-C POS	PILOTS NO. 2-D	P7-14	30-31-00
7	OFF	P11-38	P11-38	1A19-C POS	PILOTS NO. 2-D	P7-14	30-31-00
8	OFF	P11-38	P11-38	1A19-C POS	PILOTS NO. 2-D	P7-14	30-31-00

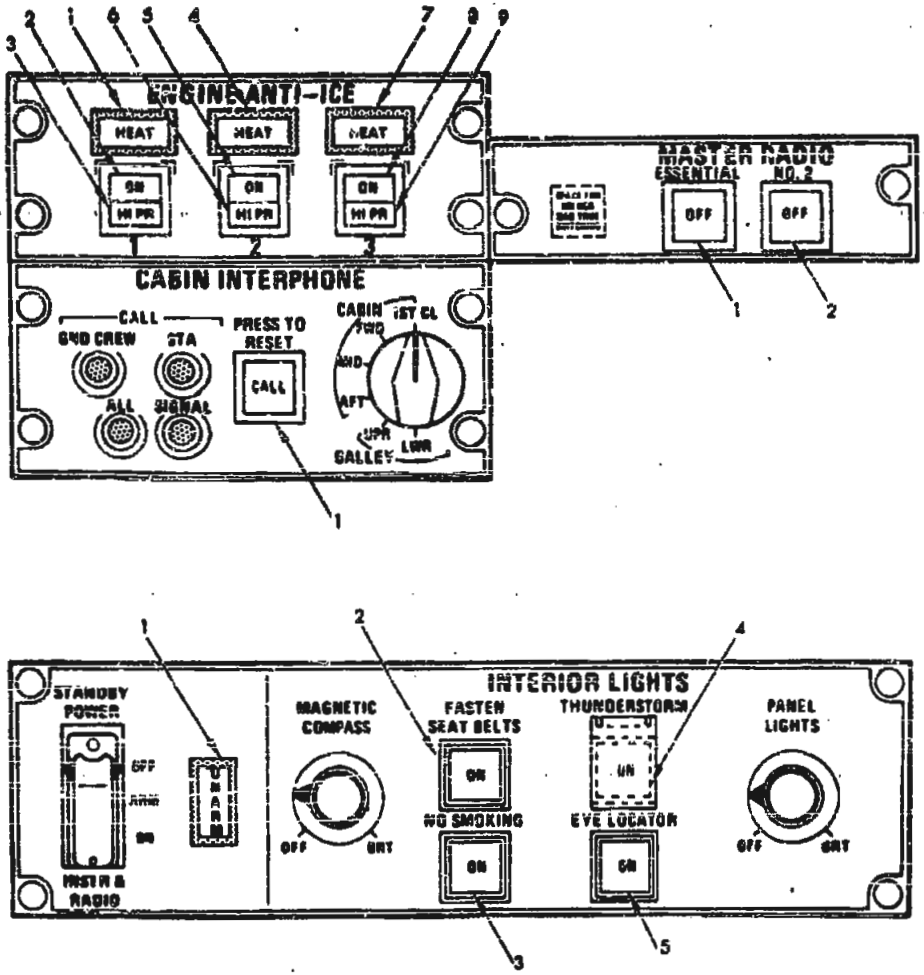
WINDSHIELD HEAT PANEL							
IND NO.	LEGEND	BOX TEST INPUT CONN & PIN NO.	BOX SIGNAL INPUT CONN & PIN NO.	CARD DRIVER AND INPUT SIG	TEST RELAY TITLE & PINS	BOX OUTPUT CONN & PIN NO.	ATA REF.
1	IDLE	P11-6	P11-5	1A2-C POS	PILOTS NO. 3-D	P7-16	30-41-00
2	FAULT	P17-35	P8-8	1A29-13 POS	PILOTS NO. 3-A	P11-28	30-41-00
3	ON	P11-5	P11-5	1A2-C POS	PILOTS NO. 3-D	P7-16	30-41-00
4	IDLE	P11-5	P11-5	1A2-C POS	PILOTS NO. 3-D	P7-16	30-41-00
5	FAULT	P17-35	P18-8	1A12-2 POS	PILOTS NO. 3-A	P11-14	30-41-00
6	OFF	P11-6	P11-5	1A2-C POS	PILOTS NO. 3-D	P7-16	30-41-00
7	FAULT	P17-36			PILOTS NO. 3-A		30-41-00
8	OFF	P11-5	P11-5	1A2-C POS	PILOTS NO. 3-D	P7-16	30-41-00
9	FAULT	P12-36	P7-15	1A12-3 POS	PILOTS NO. 3-A	P11-31	30-41-00
10	OFF	P11-5	P11-5	1A2-C POS	PILOTS NO. 3-D	P7-16	30-41-00
11	FAULT	P17-35	P7-47	1A12-4 POS	PILOTS NO. 3-A	P11-15	30-41-00
12	OFF	P11-5	P11-5	1A2-C POS	PILOTS NO. 3-D	P7-16	30-41-00
13	FAULT	P17-35			PILOTS NO. 3-A		30-41-00

WING ANTI-ICE PANEL							
IND NO.	LEGEND	BOX TEST INPUT CONN & PIN NO.	BOX SIGNAL INPUT CONN & PIN NO.	CARD DRIVER AND INPUT SIG	TEST RELAY TITLE & PINS	BOX OUTPUT CONN & PIN NO.	ATA REF.
1	DUCT FAIL	P17-35	P8-36	1A12-10 POS	PILOTS NO. 3-A	P11-20	30-13-00
2	ON	P11-5	P11-5	1A2-C POS	PILOTS NO. 3-D	P7-16	30-13-00
3	OVHT	P17-35	P8-48	1A12-11 POS	PILOTS NO. 3-A	P11-4	30-13-00
4	ON	P11-5	P11-5	1A2-C POS	PILOTS NO. 3-D	P7-16	30-13-00
5	OPEN	P17-35	P22-44	1A9-12 POS	PILOTS NO. 3-A	P1-55	30-13-00
6	DUCT FAIL	P17-35	P21-21	1A9-10 POS	PILOTS NO. 3-A	P11-46	30-13-00
7	ON	P11-5	P11-5	1A2-C POS	PILOTS NO. 3-D	P7-16	30-13-00
8	OVHT	P17-35	P20-19	1A9-5 POS	PILOTS NO. 3-A	P11-41	30-13-00
9	ON	P11-5	P11-5	1A2-C POS	PILOTS NO. 3-D	P7-16	30-13-00
10	OPEN	P17-35	P21-1	1A9-7 POS	PILOTS NO. 3-A	P11-46	30-13-00

LIGHTS PANEL							
IND NO.	LEGEND	BOX TEST INPUT CONN & PIN NO.	BOX SIGNAL INPUT CONN & PIN NO.	CARD DRIVER AND INPUT SIG	TEST RELAY TITLE & PINS	BOX OUTPUT CONN & PIN NO.	ATA REF.
1	BRT	P11-6	P11-5	1A2-C POS	PILOTS NO. 3-D	P7-16	33-17-00
2	DIM	P11-8	P11-5	1A2-C POS	PILOTS NO. 3-D	P7-16	33-17-00
3	ON	P11-5	P11-5	1A2-C POS	PILOTS NO. 3-D	P7-16	33-17-00

R Indicator Signals - Evac, Air Data Snsr Heat, Cmps (First
R Officers), Wshld Ht, Wg Anti-Ice, and Lts (Pilots) Pnls
R Figure 115

MI-0001-33-5200



ENGINE ANTI-ICE PANEL

IND NO.	LEGEND	BOX TEST INPUT CONN & PIN NO.	BOX SIGNAL INPUT CONN AND PIN NO.	CARD DRIVER AND INPUT SIG	TEST RELAY TITLE AND PINS	BOX OUTPUT CONN & PIN NO.	ATA REF.
1	HEAT	P17-35	P22-3	1AB-11 POS	PILOTS NO. 3-A	P11-10	30-21-00
2	ON	P11-5	P11-5	1A2-C POS	PILOTS NO. 3-D	P7-15	30-21-00
3	HIPR	P17-36	P8-6	1A12-B POS	PILOTS NO. 3-A	P11-9	30-21-00
4	HEAT	P17-35	P10-6	1A12-1 POS	PILOTS NO. 3-A	P11-25	30-21-00
5	ON	P11-5	P11-5	1A2-C POS	PILOTS NO. 3-D	P7-10	30-21-00
6	HIPR	P17-36	P18-6	1A12-B POS	PILOTS NO. 3-A	P11-23	30-21-00
7	HEAT	P17-35	P21-10	1AB-B POS	PILOTS NO. 3-A	P11-82	30-21-00
8	ON	P11-5	P11-5	1A2-C POS	PILOTS NO. 3-D	P7-15	30-21-00
9	HIPR	P17-36	P20-6	1AB-4 POS	PILOTS NO. 3-A	P11-69	30-21-00

CABIN INTERPHONE PANEL

IND NO.	LEGEND	BOX TEST INPUT CONN & PIN NO.	BOX SIGNAL INPUT CONN AND PIN NO.	CARD DRIVER AND INPUT SIG	TEST RELAY TITLE AND PINS	BOX OUTPUT CONN & PIN NO.	ATA REF.
1	CALL	P11-5	P11-5	1A2-C POS	PILOTS NO. 3-D	P7-15	23-51-00

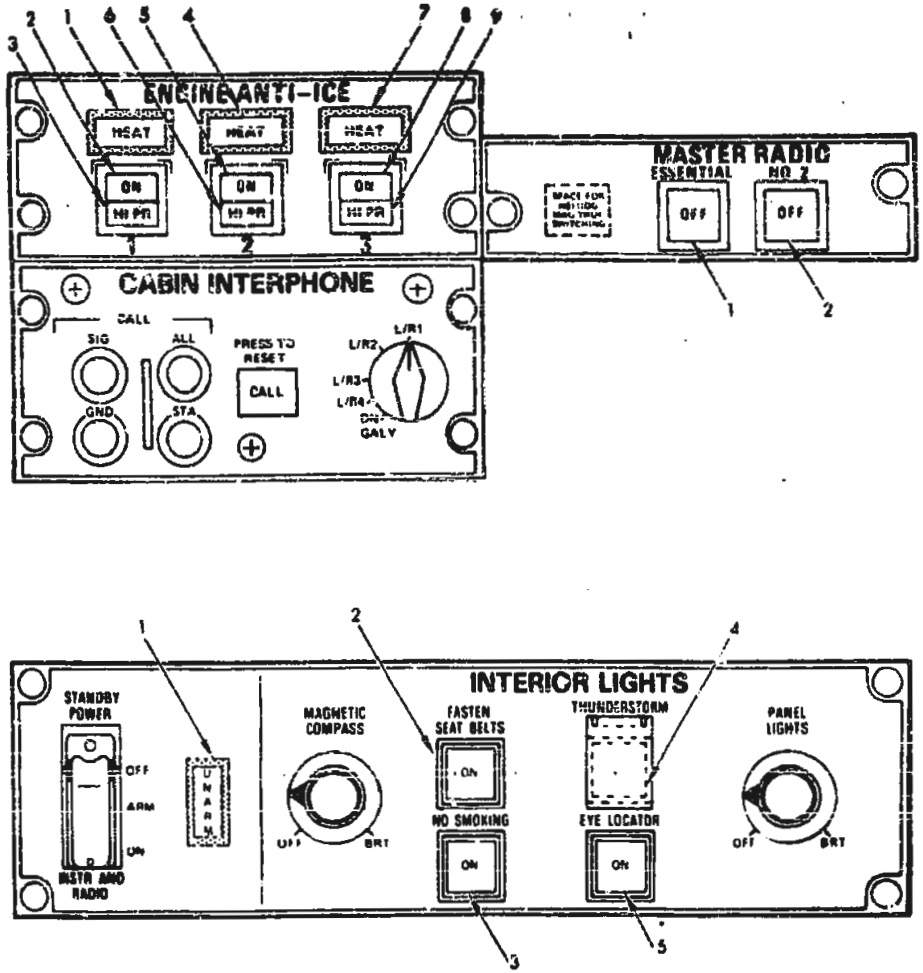
MASTER RADIO PANEL

IND NO.	LEGEND	BOX TEST INPUT CONN & PIN NO.	BOX SIGNAL INPUT CONN AND PIN NO.	CARD DRIVER AND INPUT SIG	TEST RELAY TITLE AND PINS	BOX OUTPUT CONN & PIN NO.	ATA REF.
1	OFF	P11-5	P11-5	1A2-C POS	PILOTS NO. 3-D	P7-15	34-31-00
2	OFF	P11-5	P11-5	1A2-C POS	PILOTS NO. 3-D	P7-15	34-31-00

INTERIOR LIGHTS PANEL

IND NO.	LEGEND	BOX TEST INPUT CONN & PIN NO.	BOX SIGNAL INPUT CONN AND PIN NO.	CARD DRIVER AND INPUT SIG	TEST RELAY TITLE AND PINS	BOX OUTPUT CONN & PIN NO.	ATA REF.
1	UNARM	P17-35	P7-47	1A14-3 POS	PILOTS NO. 3-B	P8-20	34-32-00
2	ON	P11-5	P11-5	1A2-C POS	PILOTS NO. 3-D	P7-15	33-39-00
3	ON	P11-5	P11-5	1A2-C POS	PILOTS NO. 3-D	P17-15	33-51-00
4	ON	P11-5	P11-5	1A2-C POS	PILOTS NO. 3-D	P7-15	33-19-00
5	ON	P11-5	P11-5	1A2-C POS	PILOTS NO. 3-D	P7-15	33-14-00

Indicator Signals - Engine Anti-Ice, Cabin Interphone, Master Radio and Interior Lights Panels
Figure 116



ENGINE ANTI-ICE PANEL

IND NO	LEGEND	BOX TEST INPUT CONN & PIN NO	BOX SIGNAL INPUT CONN AND PIN NO	CARD DRIVER AND INPUT SIG	TEST RELAY TITLE AND PINS	BOX OUTPUT CONN & PIN NO	ATA REF.
1	HEAT	P17 35	P22 3	1A8-11 POS	PILOTS NO 3 A	P11 10	30-21-00
2	ON	P11 5	P11 5	1A2 C POS	PILOTS NO 3 D	P7 16	30-21-00
3	HIPR	P17 35	P8 5	1A12 8 POS	PILOTS NO 3 A	P11 8	30-21-00
4	HEAT	P17 35	P10 8	1A12 1 POS	PILOTS NO 3 A	P11 26	30-21-00
5	ON	P11 5	P11 5	1A2 C POS	PILOTS NO. 3 D	P7 16	30-21-00
6	HIPR	P17 35	P19 6	1A12 8 POS	PILOTS NO. 3 A	P11 23	30-21-00
7	HEAT	P17 35	P21 19	1A2 8 POS	PILOTS NO 3 A	P11 52	30-21-00
8	ON	P11 5	P11 5	1A2 C POS	PILOTS NO. 3 D	P7 16	30-21-00
9	HIPR	P17 35	P20 5	1A9 4 POS	PILOTS NO 3 A	P11 49	30-21-00

CABIN INTERPHONE PANEL

IND NO	LEGEND	BOX TEST INPUT CONN & PIN NO	BOX SIGNAL INPUT CONN AND PIN NO	CARD DRIVER AND INPUT SIG	TEST RELAY TITLE AND PINS	BOX OUTPUT CONN & PIN NO	ATA REF
1	CALL	P11 5	P11 5	1A2 C POS	PILOTS NO 3 D	P7 16	23-41-00

MASTER RADIO PANEL

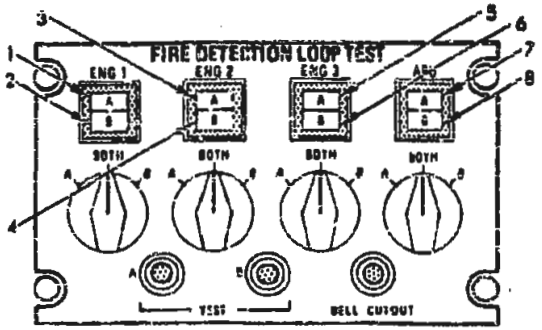
IND NO	LEGEND	BOX TEST INPUT CONN & PIN NO	BOX SIGNAL INPUT CONN AND PIN NO	CARD DRIVER AND INPUT SIG	TEST RELAY TITLE AND PINS	BOX OUTPUT CONN & PIN NO	ATA REF
1	OFF	P11 5	P11 5	1A2 C POS	PILOTS NO 3 D	P7 16	24-31-00
2	OFF	P11 5	P11 5	1A2 C POS	PILOTS NO 3 D	P7 16	24-31-00

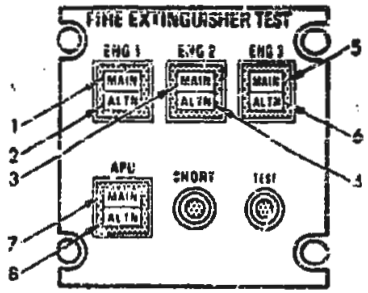
INTERIOR LIGHTS PANEL

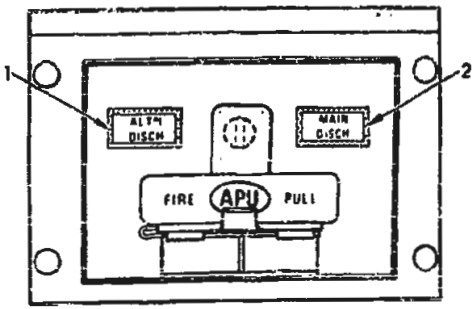
IND NO	LEGEND	BOX TEST INPUT CONN & PIN NO	BOX SIGNAL INPUT CONN AND PIN NO	CARD DRIVER AND INPUT SIG	TEST RELAY TITLE AND PINS	BOX OUTPUT CONN & PIN NO	ATA REF
1	UNARM	P17 35	P7 47	1A14 3 POS	PILOTS NO 3E	P5 29	24-32-00
2	ON	P11 5	P11 5	1A2 C POS	PILOTS NO 3 D	P7 16	33-39-00
3	ON	P11 5	P11 6	1A2 C POS	PILOTS NO 3 D	P17 16	33-39-00
4	ON	P11 5	P11 5	1A2 C POS	PILOTS NO 3 D	P7 16	33-10-00
5	ON	P11 5	P11 5	1A2 C POS	PILOTS NO 3 D	P7 16	33-15-00

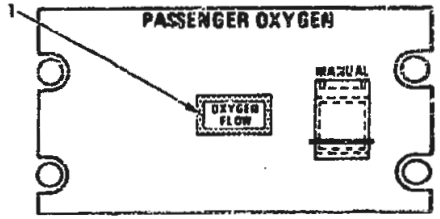
M1 0000 33 1400

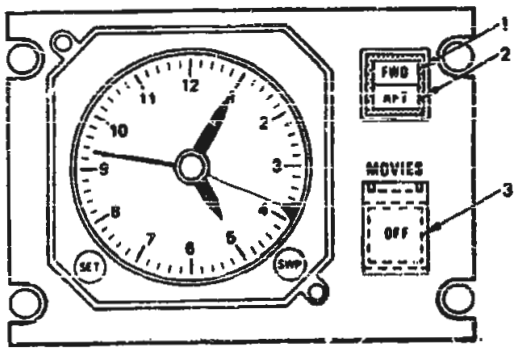
Indicator Signals - Engine Anti-Ice, Cabin Interphone, Master Radio and Inaterior Lights Panels
Figure 116











FIRE EXTINGUISHER TEST PANEL							
IND NO.	LEGEND	BOX TEST INPUT CONN & PIN NO.	BOX SIGNAL INPUT CONN & PIN NO.	CARD DRIVER AND INPUT SIG	TEST RELAY TITLE & PINS	BOX OUTPUT CONN & PIN NO.	ATA REF.
1	MAIN	P2-53	P2-53	1A30-J POS	FE/SO NO. 5A	P18-20	26-21-00
2	ALTN	P2-53	P2-53	1A30-J POS	FE/SO NO. 5A	P18-20	26-21-00
3	MAIN	P2-53	P2-53	1A30-J POS	FE/SO NO. 5A	P18-20	26-21-00
4	ALTN	P2-53	P2-53	1A30-J POS	FE/SO NO. 5A	P18-20	26-21-00
5	MAIN	P2-53	P2-53	1A30-J POS	FE/SO NO. 5A	P18-20	26-21-00
6	ALTN	P2-53	P2-53	1A30-J POS	FE/SO NO. 5A	P18-20	26-21-00
7	MAIN	P2-53	P2-53	1A30-J POS	FE/SO NO. 5A	P18-20	26-21-00
8	ALTN	P2-53	P2-53	1A30-J POS	FE/SO NO. 5A	P18-20	26-21-00

FIRE DETECTION LOOP TEST PANEL							
IND NO.	LEGEND	BOX TEST INPUT CONN & PIN NO.	BOX SIGNAL INPUT CONN & PIN NO.	CARD DRIVER AND INPUT SIG	TEST RELAY TITLE & PINS	BOX OUTPUT CONN & PIN NO.	ATA REF.
1	A	---	---	---	---	---	26-11-00
2	B	---	---	---	---	---	26-11-00
3	A	---	---	---	---	---	26-11-00
4	B	---	---	---	---	---	26-11-00
5	A	---	---	---	---	---	26-11-00
6	B	---	---	---	---	---	26-11-00
7	A	---	---	---	---	---	26-11-00
8	B	---	---	---	---	---	26-11-00

APU FIRE EXTINGUISHER PANEL							
IND NO.	LEGEND	BOX TEST INPUT CONN & PIN NO.	BOX SIGNAL INPUT CONN & PIN NO.	CARD DRIVER AND INPUT SIG	TEST RELAY TITLE & PINS	BOX OUTPUT CONN & PIN NO.	ATA REF.
1	ALTN DISCH	P6-6	P10-12	1A13-18 GND	FE/SO NO. 2D	P4-2	26-21-00
2	MAIN DISCH	P6-6	P10-11	1A13-17 GND	FE/SO NO. 2D	P4-1	26-21-00

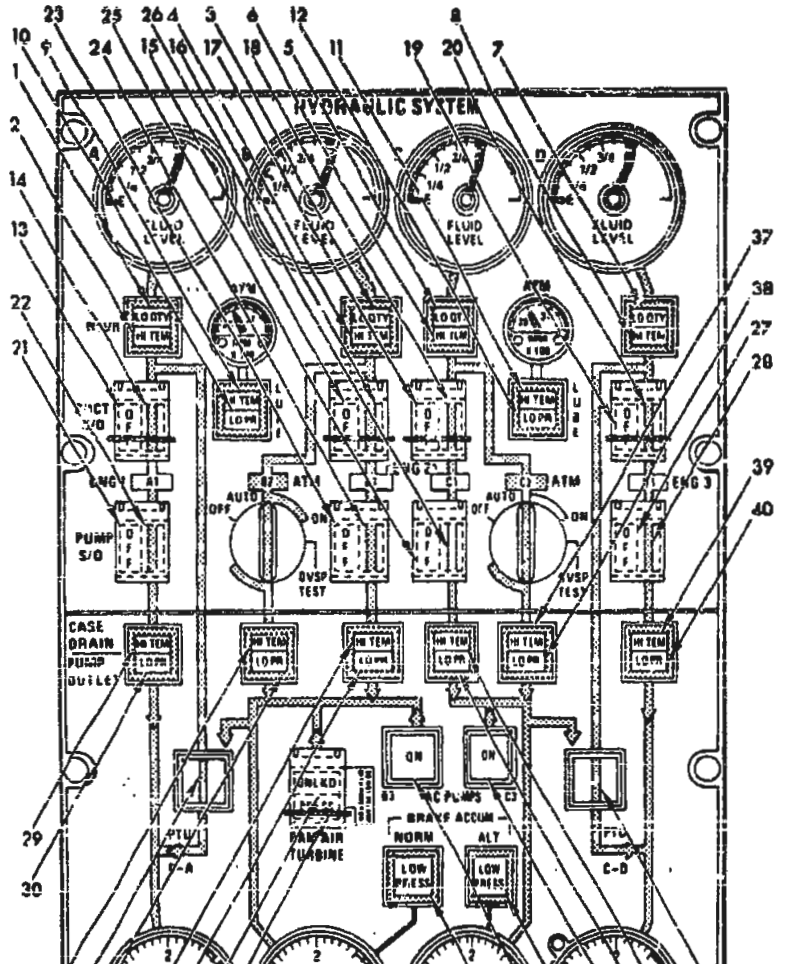
PASSENGER OXYGEN							
IND NO.	LEGEND	BOX TEST INPUT CONN & PIN NO.	BOX SIGNAL INPUT CONN & PIN NO.	CARD DRIVER AND INPUT SIG	TEST RELAY TITLE & PINS	BOX OUTPUT CONN & PIN NO.	ATA REF.
1	OXYGEN FLOW	P6-53	P18-15	1A33-12 POS	FE/SO NO. 1A	P4-29	35-21-00

CLOCK PANEL							
IND NO.	LEGEND	BOX TEST INPUT CONN & PIN NO.	BOX SIGNAL INPUT CONN & PIN NO.	CARD DRIVER AND INPUT SIG	TEST RELAY TITLE & PINS	BOX OUTPUT CONN & PIN NO.	ATA REF.
1	FWD	P6-80	P18-39	TA20-7 POS	FE/SO NO. 2-B	P13-17	23-34-00
2	AFT	P6-80	P15-59	1A28-5 POS	FE/SO NO. 2-B	P13-14	23-34-00
3	OFF	P3-52	P3-52	1A2-A POS	FE/SO NO. 4-D	P18-2	23-34-00

NOTE
⚠1 NOT THROUGH INDICATOR LIGHTS CONTROL BOX

M1-0001-33-018

R Indicator Signals - Fire Detection Loop Test, Fire
R Extinguisher Test, APU Fire Extinguisher, Oxygen, and Clock Panels
R Figure 117

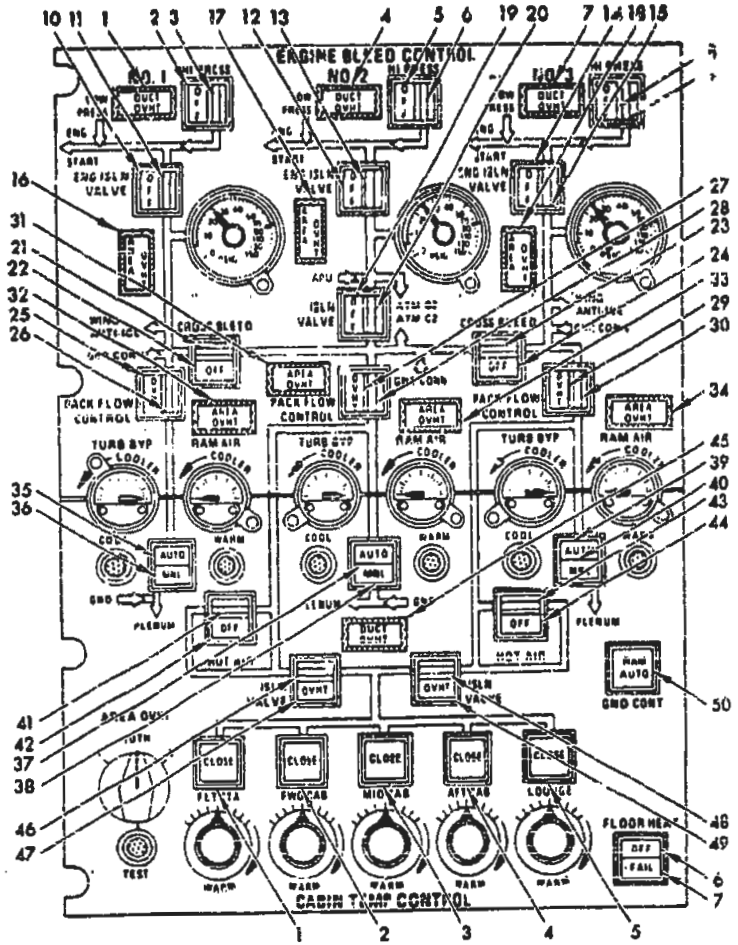


HYDRAULIC SYSTEM PANEL							
IND NO.	LEGEND	BOX TEST INPUT CONN & PIN NO.	BOX SIGNAL INPUT CONN & PIN NO.	CARD DRIVER AND INPUT SIG	TEST RELAY TITLE AND PINS	BOX OUTPUT CONN & PIN NO.	ATA REF.
1	LO QTY	P5-6	P9-1	1A24-17 GND	FE/SO NO. 2D	P3-40	29-32-00
2	HI TEM	P5-8	P9-2	1A24-18 GND	FE/SO NO. 2D	P3-41	29-32-00
3	LO QTY	P5-6	P9-8	1A24-19 GND	FE/SO NO. 2D	P3-47	29-32-00
4	HI TEM	P5-8	P9-9	1A24-23 GND	FE/SO NO. 2D	P3-48	29-32-00
5	LO QTY	P5-6	P9-19	1A26-17 GND	FE/SO NO. 2D	P13-30	29-32-00
6	HI TEM	P5-8	P9-18	1A26-18 GND	FE/SO NO. 2D	P13-37	29-32-00
7	LO QTY	P5-6	P9-24	1A26-24 GND	FE/SO NO. 2D	P13-40	29-32-00
8	HI TEM	P5-8	P9-25	1A26-25 GND	FE/SO NO. 2D	P13-41	29-32-00
9	HI TEM	P5-8	P8-7	1A10-7 POS	FE/SO NO. 2C	P3-47	29-11-00
10	LO PR	P5-81	P8-6	1A10-1 POS	FE/SO NO. 2C	P3-46	29-11-00
11	HI TEM	P5-81	P8-17	1A10-9 POS	FE/SO NO. 2C	P13-38	29-11-00
12	LO PR	P5-81	P8-18	1A10-8 POS	FE/SO NO. 2C	P13-34	29-11-00
13	OFF	P3-51	P3-51	1A35-A POS	FE/SO NO. 1D	P18-3	29-11-00
14	FLOWBAR	P3-51	P3-51	1A35-A POS	FE/SO NO. 1D	P18-3	29-11-00
15	OFF	P3-51	P3-51	1A35-A POS	FE/SO NO. 1D	P18-3	29-11-00
16	FLOWBAR	P3-51	P3-51	1A35-A POS	FE/SO NO. 1D	P18-3	29-11-00
17	OFF	P3-51	P3-51	1A35-A POS	FE/SO NO. 1D	P18-3	29-11-00
18	FLOWBAR	P3-51	P3-51	1A35-A POS	FE/SO NO. 1D	P18-3	29-11-00
19	OFF	P3-51	P3-51	1A35-A POS	FE/SO NO. 1D	P18-3	29-11-00
20	FLOWBAR	P3-51	P3-51	1A35-A POS	FE/SO NO. 1D	P18-3	29-11-00
21	OFF	P3-51	P3-51	1A35-A POS	FE/SO NO. 1D	P18-3	29-11-00
22	FLOWBAR	P3-51	P3-51	1A35-A POS	FE/SO NO. 1D	P18-3	29-11-00
23	OFF	P3-51	P3-51	1A35-A POS	FE/SO NO. 1D	P18-3	29-11-00
24	FLOWBAR	P3-51	P3-51	1A35-A POS	FE/SO NO. 1D	P18-3	29-11-00
25	OFF	P3-51	P3-51	1A35-A POS	FE/SO NO. 1D	P18-3	29-11-00
26	FLOWBAR	P3-51	P3-51	1A35-A POS	FE/SO NO. 1D	P18-3	29-11-00
27	OFF	P3-51	P3-51	1A35-A POS	FE/SO NO. 1D	P18-3	29-11-00
28	FLOWBAR	P3-51	P3-51	1A35-A POS	FE/SO NO. 1D	P18-3	29-11-00
29	HI TEM	P5-6	P22-23	1A13-20 GND	FE/SO NO. 2D	P1-1	29-11-00
30	LO PR	P17-13	P22-12	1A5-17 GND	FE/SO NO. 4C	P2-32	29-11-00
31	HI TEM	P5-6	P8-12	1A24-24 GND	FE/SO NO. 2D	P3-48	29-11-00
32	LO PR	P5-26	P10-18	1A15-19 GND	FE/SO NO. 3F	P16-42	29-11-00
33	HI TEM	P5-6	P10-36	1A13-19 GND	FE/SO NO. 2D	P3-1	29-11-00
34	LO PR	P5-8	P10-33	1A15-23 GND	FE/SO NO. 2D	P3-2	29-11-00
35	HI TEM	P5-8	P10-40	1A13-24 GND	FE/SO NO. 2D	P3-33	29-11-00
36	LO PR	P5-6	P10-41	1A13-25 GND	FE/SO NO. 2D	P3-34	29-11-00
37	HI TEM	P5-6	P8-22	1A26-19 GND	FE/SO NO. 2D	P13-39	29-11-00
38	LO PR	P5-26	P21-24	1A5-17 GND	FE/SO NO. 3F	P13-5	29-11-00
39	HI TEM	P5-6	P18-44	1A26-21 GND	FE/SO NO. 2D	P12-1	29-11-00
40	LO PR	P5-26	P21-26	1A6-19 GND	FE/SO NO. 3F	P13-21	29-11-00
41	FLOWBAR	P5-81	P5-49	1A24-15 POS	FE/SO NO. 2C	P3-43	29-11-00
42	UNLKD	P5-26	P21-22	1A7-23 GND	FE/SO NO. 3C	P13-2	29-21-00
43	PRESS	P5-26	P22-37	1A5-24 GND	FE/SO NO. 3F	P13-11	29-21-00
44	ON	P5-81	P8-1	1A24-13 POS	FE/SO NO. 2C	P3-42	29-11-00
45	ON	P5-81	P8-40	1A8-14 POS	FE/SO NO. 2C	P1-46	29-11-00
46	FLOWBAR	P5-81	P5-50	1A34-15 POS	FE/SO NO. 2C	P12-42	29-11-00
47	LO PRESS	P17-11	P10-1	1A7-15 POS	FE/SO NO. 4A	P16-39	32-48-00
48	LO PRESS	P17-12	P10-15	1A8-10 POS	FE/SO NO. 4B	P16-41	32-48-00

MI-10801-29-004

Indicator Signals - Hydraulic System Panel
Figure 118

R EFFECTIVITY: ALL
R
007B



CABIN TEMP CONTROL							
IND NO.	LEGEND	BOX TEST INPUT CONN & PIN NO.	BOX SIGNAL INPUT CONN & PIN NO.	CARD DRIVER AND INPUT SIG	TEST RELAY TITLE & PINS	BOX OUTPUT CONN & PIN NO.	ATA REF
1	CLOSE	P6-54	P16-22	1A32-8 POS	FE/SO NO. 1B	P3-35	21-60-00
2	CLOSE	P6-54	P16-23	1A32-10 POS	FE/SO NO. 1B	P3-36	21-61-00
3	CLOSE	P6-54	P16-24	1A32-11 POS	FE/SO NO. 1B	P3-37	21-61-00
4	CLOSE	P6-54	P10-25	1A32-12 POS	FE/SO NO. 1B	P3-38	21-61-00
5	CLOSE	P6-19	P16-26	1A22-13 POS	FE/SO NO. 3B	P3-39	21-61-00
6	OFF	P3-51	P3-51	1A35-A POS	FE/SO NO. 1D	P18-3	21-43-00
7	FAIL	P6-54	P6-38	1A15-4 POS	FE/SO NO. 1B	P12-47	21-43-00

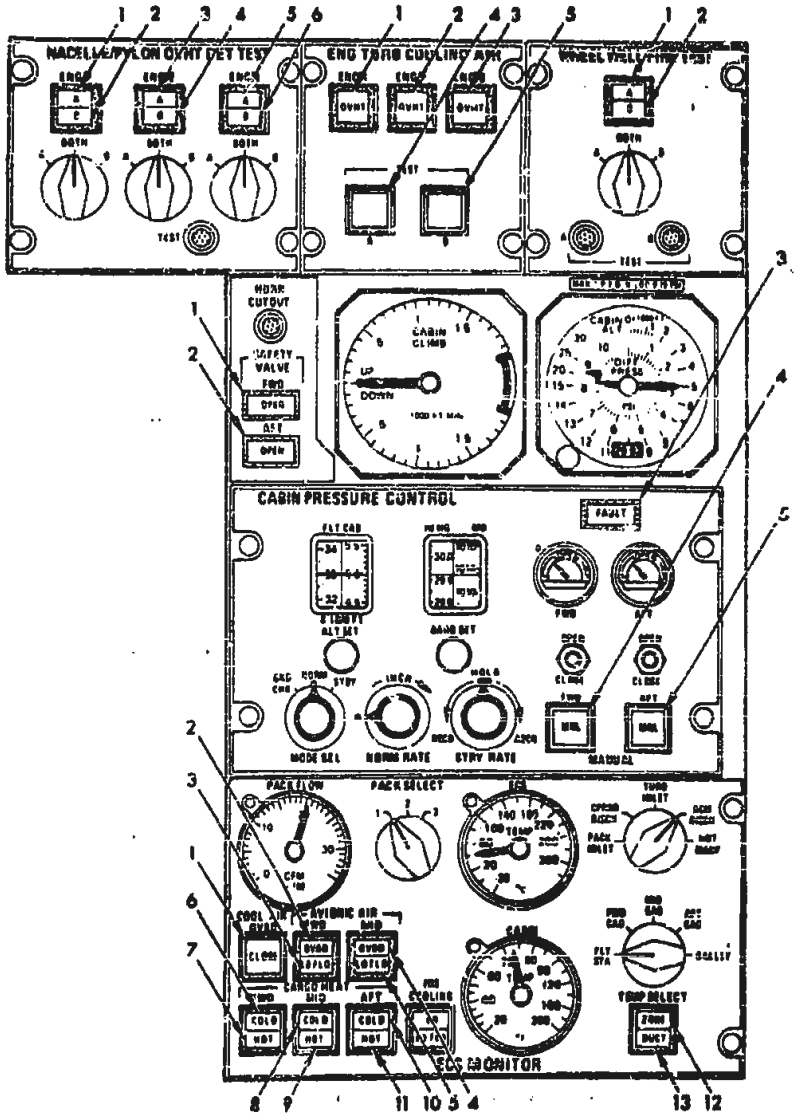
ENGINE BLEED CONTROL PANEL							
IND NO	LEGEND	BOX TEST INPUT CONN & PIN NO	BOX SIGNAL INPUT CONN & PIN NO.	CARD DRIVER AND INPUT SIG	TEST RELAY TITLE & PINS	BOX OUTPUT CONN & PIN NO.	ATA REF
1	DUCT OVHT	P6-54	P22-42	1A6-10 POS	FE/SO NO. 1B	P1-28	36-11-00
2	OFF	P3-51	P2-51	1A35-A POS	FE/SO NO. 1D	P18-3	36-11-00
3	FLOWBAR	P6-54	P6-45	1A10-8 POS	FE/SO NO. 1B	P1-24	36-11-00
4	DUCT OVHT	P6-54	P10-49	1A8-9 POS	FE/SO NO. 1B	P3-26	36-11-00
5	OFF	P3-51	P3-51	1A35-A POS	FE/SO NO. 1D	P18-3	36-11-00
6	FLOWBAR	P6-54	P6-52	1A15-10 POS	FE/SO NO. 1B	P3-24	36-11-00
7	DUCT OVHT	P6-19	P16-37	1A22-14 POS	FE/SO NO. 3B	P12-25	36-11-00
8	OFF	P3-51	P3-51	1A35-A POS	FE/SO NO. 1D	P18-3	36-11-00
9	FLOWBAR	P6-19	P20-54	1A13-10 POS	FE/SO NO. 3B	P12-24	36-11-00
10	OFF	P3-51	P3-51	1A35-A POS	FE/SO NO. 1D	P18-3	36-11-00
11	FLOWBAR	P6-19	P22-2	1A13-12 POS	FE/SO NO. 3B	P1-26	36-11-00
12	OFF	P3-51	P3-51	1A35-A POS	FE/SO NO. 1D	P18-3	36-11-00
13	FLOWBAR	P6-54	P10-4	1A8-1 POS	FE/SO NO. 1B	P3-28	36-11-00
14	OFF	P3-51	P3-51	1A35-A POS	FE/SO NO. 1D	P18-3	36-11-00
15	FLOWBAR	P6-19	P21-5	1A13-11 POS	FE/SO NO. 3B	P12-26	36-11-00
16	AREA OVHT	P6-54	P8-3	1A15-3 POS	FE/SO NO. 1B	P1-29	36-22-00
17	AREA OVHT	P6-19	P18-4	1A28-6 POS	FE/SO NO. 3B	P13-19	36-22-00
18	AREA OVHT	P6-19	P20-J	1A13-5 POS	FE/SO NO. 3B	P12-28	36-22-00
19	OFF	P3-51	P3-51	1A35-A POS	FE/SO NO. 1D	P18-3	36-14-00
20	FLOWBAR	P6-54	P10-5	1A9-2 POS	FE/SO NO. 1B	P13-18	36-14-00
21	FLOWBAR	P6-54	P22-48	1A6-16 POS	FE/SO NO. 1B	P1-40	36-14-00
22	OFF	P3-51	P3-51	1A35-A POS	FE/SO NO. 1D	P18-3	36-14-00
23	FLOWBAR	P6-19	P16-40	1A32-1 POS	FE/SO NO. 3B	P13-30	36-14-00
24	OFF	P3-51	P3-51	1A35-A POS	FE/SO NO. 1D	P18-3	36-14-00
25	OVHT	P6-54	P6-3	1A33-16 POS	FE/SO NO. 1B	P1-31	21-21-00
26	FLOWBAR	P6-54	P6-2	1A33-15 POS	FE/SO NO. 1B	P1-29	21-21-00
27	OVHT	P6-19	P17-3	1A32-9 POS	FE/SO NO. 3B	P3-61	21-21-00
28	FLOWBAR	P6-19	P17-2	1A32-6 POS	FE/SO NO. 3B	P3-29	21-21-00
29	OVHT	P6-54	P16-3	1A32-5 POS	FE/SO NO. 1B	P12-31	21-21-00
30	FLOWBAR	P6-54	P16-2	1A32-4 POS	FE/SO NO. 1B	P12-29	21-21-00
31	AREA OVHT	P6-19	P19-3	1A28-2 POS	FE/SO NO. 1B	P3-28	36-22-00
32	AREA OVHT	P6-54	P8-2	1A15-12 POS	FE/SO NO. 1B	P1-27	36-22-00
33	AREA OVHT	P6-19	P19-2	1A28-1 POS	FE/SO NO. 3B	P3-27	36-22-00
34	AREA OVHT	P6-19	P20-2	1A13-4 POS	FE/SO NO. 3B	P12-27	36-22-00
35	AUTO	P3-51	P3-51	1A35-A POS	FE/SO NO. 1D	P18-3	21-00-00
36	MNL	P3-61	P3-51	1A35-A POS	FE/SO NO. 1D	P18-3	21-00-00
37	AUTO	P3-51	P3-51	1A35-A POS	FE/SO NO. 1D	P18-3	21-00-00
38	MNL	P3-61	P3-51	1A35-A POS	FE/SO NO. 1D	P18-3	21-00-00
39	AUTO	P3-61	P3-61	1A35-A POS	FE/SO NO. 1D	P18-3	21-00-00
40	MNL	P3-61	P3-51	1A35-A POS	FE/SO NO. 1D	P18-3	21-00-00
41	FLOWBAR	P6-54	P6-43	1A15-7 POS	FE/SO NO. 1B	P1-30	21-41-00
42	OFF	P3-51	P3-51	1A35-A POS	FE/SO NO. 1D	P18-3	21-41-00
43	FLOWBAR	P6-54	P6-41	1A15-5 POS	FE/SO NO. 1B	P12-30	21-41-00
44	OFF	P3-61	P3-51	1A35-A POS	FE/SO NO. 1D	P18-3	21-41-00
45	DUCT OVHT	P6-53	P6-52	1A22-3 POS	FE/SO NO. 1A	P1-34	21-41-00
46	FLOWBAR	P6-19	P16-46	1A32-2 POS	FE/SO NO. 3B	P13-24	21-41-00
47	OVHT	P6-54	P6-30	1A15-11 POS	FE/SO NO. 1B	P13-23	21-41-00
48	FLOWBAR	P17-12	P17-52	1A28-16 POS	FE/SO NO. 4B	P1-52	21-41-00
49	OVHT	P6-19	P18-53	1A31-9 POS	FE/SO NO. 3B	P2-48	21-41-00
50	RAM AUTO	P6-19	P18-28	1A31-1 POS	FE/SO NO. 3B	P13-29	21-00-00

M1-0002-33-787

R Indicator Signals - Engine Bleed and Cabin Temperature
R Control Panel
R Figure 119

EFFECTIVITY: ALL

0078



Indicator Signals - Nacelle/Pylon Test, Wheel Well Fire Test, Engine Air, Cabin Pressure and ECS Monitor Panels
Figure 120

NACELLE/PYLON OVHT DET TEST PANEL							
IND NO.	LEGEND	BOX TEST INPUT CONN & PIN NO.	BOX SIGNAL INPUT CONN & PIN NO.	CARD DRIVER AND INPUT SIG	TEST RELAY TITLE & PINS	BOX OUTPUT CONN & PIN NO.	ATA REF.
1	A	P6-60	P22-22	1AG-8 POS	FE/SO NO. 2B	P14-18	26-32-00
2	B	P6-53	P8-67	1A13-1 POS	FE/SO NO. 1A	P1-4	26-32-00
3	A	P6-15	P15-44	1A25-15 POS	FE/SO NO. 3A	P2-15	26-32-00
4	B	P6-53	P8-52	1A13-6 POS	FE/SO NO. 1A	P2-4	26-32-00
5	A	P6-15	P20-51	1A6-3 POS	FE/SO NO. 3A	P12-60	26-32-00
6	B	P17-8	P20-52	1A17-12 POS	FE/SO NO. 3B	P12-4	26-32-00

ENGINE TURB COOLING AIR							
IND NO.	LEGEND	BOX TEST INPUT CONN & PIN NO.	BOX SIGNAL INPUT CONN & PIN NO.	CARD DRIVER AND INPUT SIG	TEST RELAY TITLE & PINS	BOX OUTPUT CONN & PIN NO.	ATA REF.
1	OVHT	P6-60	P22-18	1A6-10 POS	FE/SO NO. 2B	P14-17	77-22-00
2	OVHT	P17-11	P8-11	1A10-8 POS	FE/SO NO. 2A	P1-66	77-22-00
3	OVHT	P6-15	P21-17	1A6-5 POS	FE/SO NO. 3A	P13-1	77-22-00
4	----	P3-51	P3-51	1A35 A POS	FE/SO NO. 1D	P18-3	77-22-00
5	----	P3-51	P3-51	1A35 A POS	FE/SO NO. 1D	P18-3	77-22-00

WHEEL WELL FIRE TEST							
IND NO.	LEGEND	BOX TEST INPUT CONN & PIN NO.	BOX SIGNAL INPUT CONN & PIN NO.	CARD DRIVER AND INPUT SIG	TEST RELAY TITLE & PINS	BOX OUTPUT CONN & PIN NO.	ATA REF.
1	A	----	---	-----	---	---	26-11-00
2	B	----	---	-----	---	---	26-11-00 ⚠1

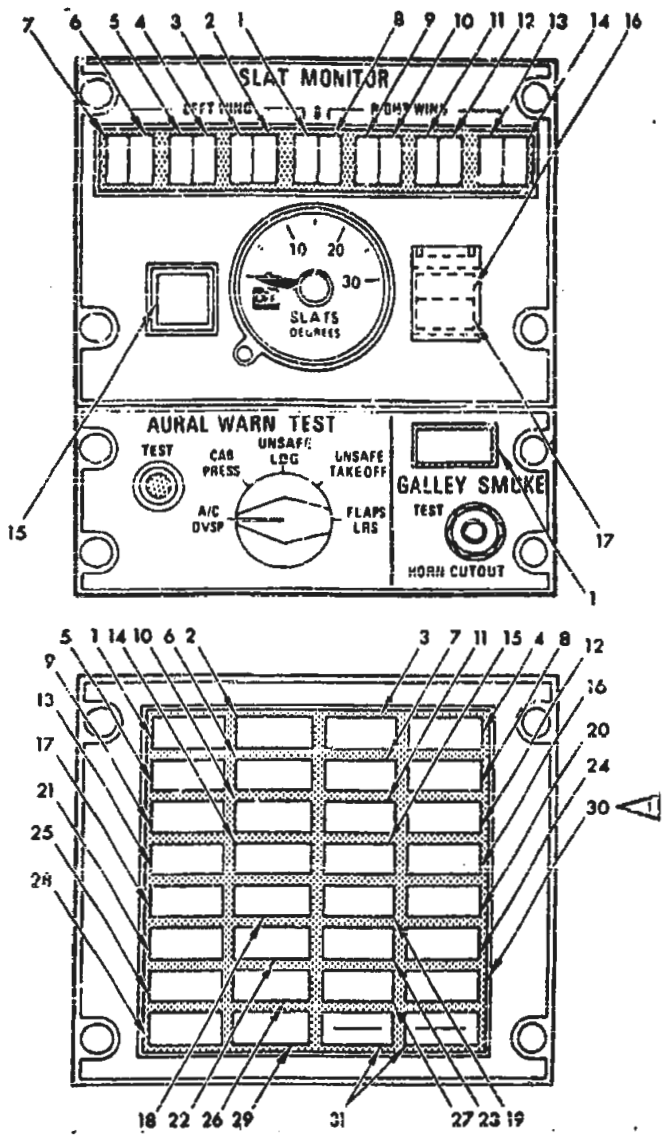
CABIN PRESSURE CONTROL PANEL							
IND NO.	LEGEND	BOX TEST INPUT CONN & PIN NO.	BOX SIGNAL INPUT CONN & PIN NO.	CARD DRIVER AND INPUT SIG	TEST RELAY TITLE & PINS	BOX OUTPUT CONN & PIN NO.	ATA REF.
1	OPEN	P17-13	P18-51	1A17-21 GND	FE/SO NO. 4C	P13-26	21-22-00
2	OPEN	P17-13	P18-56	1A32-20 GND	FE/SO NO. 4C	P13-27	21-22-00
3	FAULT	P6-23	P18-54	1A17-14 POS	FE/SO NO. 3C	P12-48	21-31-00
4	MNL	P6-23	P18-24	1A15-14 POS	FE/SO NO. 3C	P12-48	21-31-00
5	MNL	P6-23	P18-27	1A17-13 POS	FE/SO NO. 3C	P1-38	21-31-00

ECS MONITOR PANEL							
IND NO	LEGEND	BOX TEST INPUT CONN & PIN NO	BOX SIGNAL INPUT CONN & PIN NO	CARD DRIVER AND INPUT SIG	TEST RELAY TITLE & PINS	BOX OUTPUT CONN & PIN NO.	ATA REF.
1	CLOSE	P6-23	P20-48	1A33 9 POS	FE/SO NO. 3C	P13-26	21-18-00
2	OVBD	P6 53	P8 60	1A13-16 POS	FE/SO NO. 1A	P8-50	21-26-00
3	LO FLO	P6-53	P8-59	1A13-15 POS	FE/SO NO. 1A	P2-50	21-26-00
4	OVBD	P6-53	P8-35	1A16-6 POS	FE/SO NO. 1A	P1-32	21-26-00
5	LO FLO	P6-53	P8-34	1A15-2 POS	FE/SO NO. 1A	P12-50	21-26-00
6	COLD	P6-24	P8-8	1A28 17 GND	FE/SO NO. 3D	P1-38	21-44-00
7	HOT	P17 13	P19 35	1A32-22 GND	FE/SO NO. 4C	P1-54	21-44-00
8	COLD	P6-24	P10 53	1A32-22 GND	FE/SO NO. 3D	P2-49	21-44-00
9	HOT	P6-24	P6 37	1A31-26 GND	FE/SO NO. 3D	P13-20	21-44-00
10	COLD	P6-24	P10 51	1A22-20 GND	FE/SO NO. 3D	P13-29	21-44-00
11	HOT	P6-24	P6-42	1A32-17 GND	FE/SO NO. 3D	P13-31	21-44-00
12	ZONE	P3-51	P3-51	1A35-A POS	FE/SO NO. 1D	P18-3	21-43-00
13	DUCT	P3 51	P3-51	1A35 A POS	FE/SO NO. 1D	P18-3	21-43-00

⚠1 **NOTE**

NOT THROUGH INDICATOR LIGHT CONTROL BOX

M1-10301-23-000



Indicator Signals - Slat Monitor, Aural Warning Test and Annunciator Panels
Figure 121

R R R

SLAT MONITOR PANEL

IND NO.	LEGEND	BOX TEST INPUT CONN & PIN NO	BOX SIGNAL INPUT CONN AND PIN NO	CARD DRIVER AND INPUT SIG	TEST RELAY TITLE AND PINS	BOX OUTPUT CONN & PIN NO.	ATA REF.
1	1	P8-24	P8 20	1A28-18 GND	FE/SO NO. 3D	P1-42	27-81-00
2	2	P8-24	P8 21	1A28 23 GND	FE/SO NO. 3D	P1-43	27-81-00
3	3	P8-24	P8 22	1A28 24 GND	FE/SO NO. 3D	P1-44	27-81-00
4	4	P8-24	P8 23	1A28-25 GND	FE/SO NO. 3D	P1-45	27-81-00
5	5	P8 24	P8 24	1A31 17 GND	FE/SO NO. 3D	P1-46	27-81-00
6	6	P8 24	P8 25	1A31 18 GND	FE/SO NO. 3D	P1 47	27 81-00
7	7	P8 24	P8 26	1A31 19 GND	FE/SO NO. 3D	P1-48	27-81-00
8	.	P17 13	P20 21	1A24 20 GND	FE/SO NO. 4C	P13-33	27-81-00
9	2	P17 13	P20 22	1A24-22 GND	FE/SO NO. 4C	P13-34	27-81-00
10	3	P17 13	P20 23	1A22 23 GND	FE/SO NO. 4C	P13 35	27-81-00
11	4	P17 13	P20 24	1A22 24 GND	FE/SO NO. 4D	P13-36	27-81-00
12	5	P17 13	P20 25	1A22 25 GND	FE/SO NO. 4C	P13-37	27-81-00
13	6	P17 13	P20 26	1A8 20 GND	FE/SO NO. 4C	P13-38	27-81-00
14	7	P17-13	P20 27	1A8 22 GND	FE/SO NO. 4C	P13-39	27 81-00
15	ON	P3 51	P3 51	1A35 A POS	FE/SO NO. 1D	P18-3	27-81-00
16	1 LOCK	P4 43	P4 43	1A36-D GND	FE/SO NO. 3C	P18-22	27-81-00
17	2 LOCK	P4 43	P4-43	1A35-D GND	FE/SO NO. 3C	P18-22	27-81-00

AURAL WARN TEST PANEL

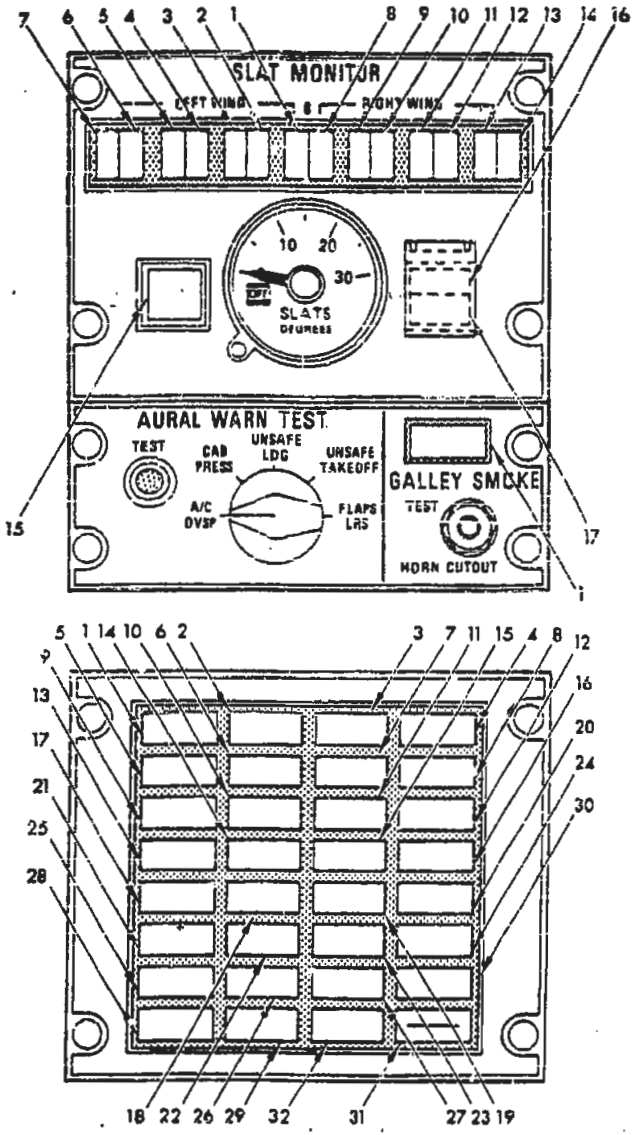
IND NO	LEGEND	BOX TEST INPUT CONN & PIN NO	BOX SIGNAL INPUT CONN AND PIN NO	CARD DRIVER AND INPUT SIG	TEST RELAY TITLE AND PINS	BOX OUTPUT CONN & PIN NO.	ATA REF.
1	GALLEY SMOKE	P8 53	P8 58	1A13 9 POS	FE/SO NO. 1A	P1-60	26 16-00

FE/SO ANNUNCIATOR PANEL

IND NO	LEGEND	BOX TEST INPUT CONN & PIN NO	BOX SIGNAL INPUT CONN AND PIN NO	CARD DRIVER AND INPUT SIG	TEST RELAY TITLE AND PINS	BOX OUTPUT CONN & PIN NO.	ATA REF.
1	LH FWD ENTRY	P8 24	P8 16	1A28 18 GND	FE/SO NO. 3D	P4-15	52-71-00
2	FWD CARGO	P17 13	P20-41	1A8 19 GND	FE/SO NO. 4C	P13-46	52-71-00
3	RH FWD ENTRY	P8 24	P8 33	1A31-24 GND	FE/SO NO. 3D	P4-18	52-71-00
4	GALLEY	P17 13	P20 47	1A8-23 GND	FE/SO NO. 4C	P13-42	52-71-00
5	LH CTR ENTRY	P8 24	P18 41	1A28-21 GND	FE/SO NO. 4D	P4-16	52-71-00
6	CENTER CARGO	P17 13	P20-38	1A8-18 GND	FE/SO NO. 4C	P13-47	52-71-00
7	RH CTR ENTRY	P8-24	P18 29	1A31-20 GND	FE/SO NO. 3D	P4-19	52-71-00
8	AVIONICS	P17 13	P20-51	1A8 24 GND	FE/SO NO. 4C	P13-41	52-71-00
9	LH AFT ENTRY	P17 13	P18 42	1A22-21 GND	FE/SO NO. 4C	P4-17	52-71-00
10	AFT CARGO	P17 13	P20-36	1A8-17 GND	FE/SO NO. 4C	P4-14	52-71-00
11	RH AFT ENTRY	P8 24	P18-40	1A31-22 GND	FE/SO NO. 3D	P4-20	52-71-00
12	FWD S DUCT	P8-24	P8 55	1A32-18 GND	FE/SO NO. 3D	P13-40	52-71-00
13	LH EMERGENCY	P8 24	P8 56	1A32-19 GND	FE/SO NO. 3D	P13-44	52-71-00
14	ESCAPE HATCH	P8-24	P8 61	1A26-22 GND	FE/SO NO. 3D	P4-21	52-71-00
15	RH EMERGENCY	P8-24	P8-57	1A26-20 GND	FE/SO NO. 3D	P13-45	52-71-00
16	AFT S DUCT	P17-13	P22 25	1A8 16 GND	FE/SO NO. 4C	P2-34	52-71-00
17	LH GEAR DOOR	P8 53	P8 19	1A33-5 POS	FE/SO NO. 1A	P1-41	32-61-00
18	NOSE GEAR DOOR	P8-23	P18 22	1A33-1 POS	FE/SO NO. 3C	P13-48	32-61-00
19	RH GEAR DOOR	P8 23	P20-20	1A33-6 POS	FE/SO NO 3C	P13-32	32-61-00
20	MAIN ELEC	P8-24	P8-32	1A31-23 GND	FE/SO NO. 3D	P13-43	52-71-00
21	SLAT ASYM DET FAULT	P8-53	P8 29	1A15-1 POS	FE/SO NO. 1A	P4-38	27-81-00
22	TAIL SKID	P8-19	P20-1	1A13-2 POS	FE/SO NO. 3D	P4-5	32-71-00
23	BLEED DUCT OVPRESS	P8 59	P20-6	1A22-16 POS	FE/SO NO. 2A	P4-7	36-11-00
24	SPARE						
25	FLAP/SLAT LOCK	P8-23	P18-47	1A33-2 POS	FE/SO NO. 3C	P4-38	27-81-00
26	WATER CPRSR 1	P17-11	P9-14	1A10-10 POS	FE/SO NO. 4A	P1-86	38-41-00
27	WATER LINE HTR	P17 12	P22 41	1A5-14 POS	FE/SO NO. 4B	P3 55	30-71-00
28	FLAP ASYM DET FAULT	P8-53	P8 6	1A33-4 POS	FE/SO NO. 1A	P4-41	27-81-00
29	WATER CPRSR 2	P17 11	P9 15	1A10-11 POS	FE/SO NO. 4A	P1 81	38-41-00
30	ELEVATOR	P8-16	P13-4	1A6-D POS	FE/SO NO. 3A	P2-81	27-31-00
31	SPARE	P18-3	---	1A35 GND	FE/FO NO. 1E	P3-61	33-17-00

NOTE
1 001-031 WITH SB 27-174

MI-0002-33-306



SLAT MONITOR PANEL

IND NO.	LEGEND	BOX TEST INPUT CONN & PIN NO.	BOX SIGNAL INPUT CONN AND PIN NO	CARD DRIVER AND INPUT SIG	TEST RELAY TITLE AND PINS	BOX OUTPUT CONN & PIN NO.	ATA REF.
1	1	P6-24	P8-20	1A28-9 GND	FE/SO NO. 3D	P1-42	27-81-00
2	2	P6-24	P8-21	1A28-23 GND	FE/SO NO. 3D	P1-43	27-81-00
3	3	P6-24	P8-22	1A28-24 GND	FE/SO NO. 3D	P1-44	27-81-00
4	4	P6-24	P8-23	1A28-25 GND	FE/SO NO. 3D	P1-45	27-81-00
5	5	P6-24	P8-24	1A31-17 GND	FE/SO NO. 3D	P1-46	27-81-00
6	6	P6-24	P8-25	1A31-18 GND	FE/SO NO. 3D	P1-47	27-81-00
7	7	P6-24	P8-26	1A31-19 GND	FE/SO NO. 3D	P1-48	27-81-00
8	1	P17-13	P20-21	1A24-20 GND	FE/SO NO 4C	P13-33	27-81-00
9	2	P17-13	P20-22	1A24-22 GND	FE/SO NO 4C	P13-34	27-81-00
10	3	P17-13	P20-23	1A22-23 GND	FE/SO NO 4C	P13-35	27-81-00
11	4	P17-13	P20-24	1A22-24 GND	FE/SO NO 4D	P13-36	27-81-00
12	5	P17-13	P20-25	1A22-25 GND	FE/SO NO 4C	P13-37	27-81-00
13	6	P17-13	P20-26	1A8-20 GND	FE/SO NO. 4C	P13-38	27-81-00
14	7	P17-13	P20-27	1A8-22 GND	FE/SO NO 4C	P13-39	27-81-00
15	ON	P3-51	P3-51	1A35-A POS	FE/SO NO 1D	P18-3	27-81-00
16	1 LOCK	P4-43	P4-43	1A35-D GND	FE/SO NO. 3C	P18-22	27-81-00
17	2 LOCK	P4-43	P4-43	1A35-D GND	FE/SO NO. 3C	P18-22	27-81-00

AURAL WARN TEST PANEL

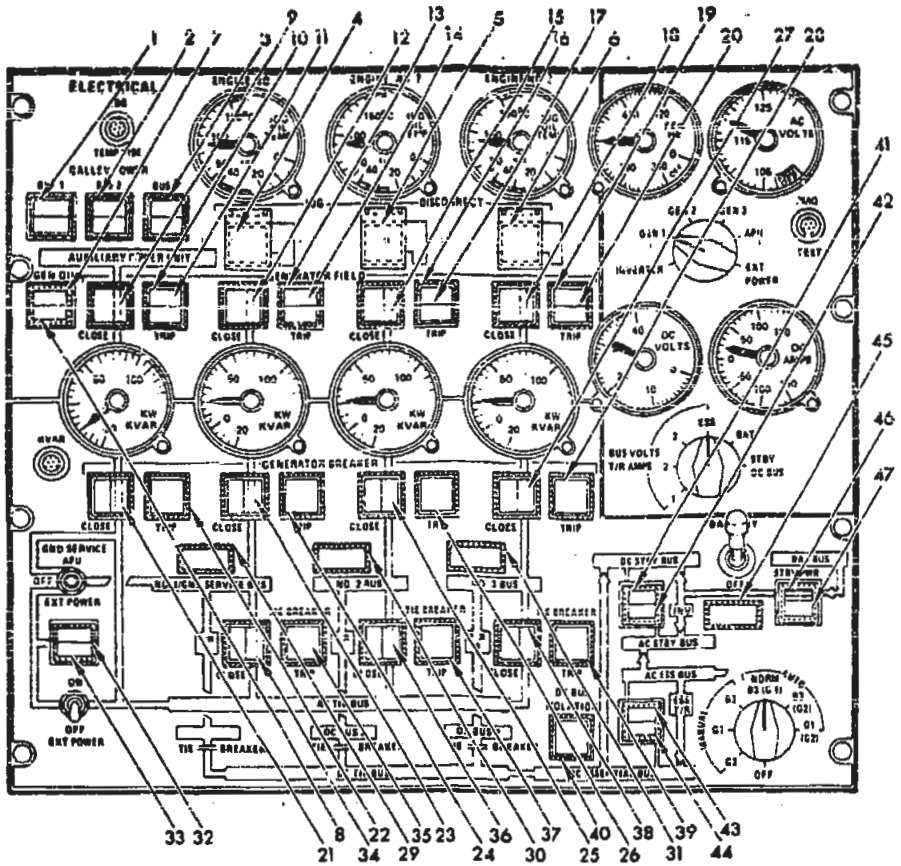
IND NO.	LEGEND	BOX TEST INPUT CONN & PIN NO.	BOX SIGNAL INPUT CONN AND PIN NO.	CARD DRIVER AND INPUT SIG	TEST RELAY TITLE AND PINS	BOX OUTPUT CONN & PIN NO.	ATA REF.
1	GALLEY SMOKE	P8-53	P8-58	1A13-9 POS	FE/SO NO. 1A	P1-50	26-15-00

FE/SO ANNUNCIATOR PANEL

IND NO.	LEGEND	BOX TEST INPUT CONN & PIN NO.	BOX SIGNAL INPUT CONN AND PIN NO.	CARD DRIVER AND INPUT SIG	TEST RELAY TITLE AND PINS	BOX OUTPUT CONN & PIN NO.	ATA REF.
1	LH FWD ENTRY	P6-24	P8-18	1A28-18 GND	FE/SO NO. 3D	P4-15	52-71-00
2	FWD CARGO	P17-13	P20-41	1A8-19 GND	FE/SO NO 4C	P13-46	52-71-00
3	RH FWD ENTRY	P6-24	P8-33	1A31-24 GND	FE/SO NO. 3D	P4-18	52-71-00
4	GALLEY	P17-13	P20-47	1A8-23 GND	FE/SO NO. 4C	P13-42	52-71-00
5	LH CTR ENTRY	P6-24	P18-41	1A28-21 GND	FE/SO NO 3D	P4-16	52-71-00
6	CENTER CARGO	P17-13	P20-38	1A8-18 GND	FE/SO NO. 4C	P13-47	52-71-00
7	RH CTR ENTRY	P6-24	P18-30	1A31-20 GND	FE/SO NO. 3D	P4-19	52-71-00
8	AVIONICS	P17-13	P20-51	1A8-24 GND	FE/SO NO. 4C	P13-61	52-71-00
9	LH AFT ENTRY	P17-13	P18-42	1A22-21 GND	FE/SO NO 4C	P4-17	52-71-00
10	AFT CARGO	P17-13	P20-30	1A8-17 GND	FE/SO NO 4C	P4-14	52-71-00
11	RH AFT ENTRY	P6-24	P18-40	1A31-22 GND	FE/SO NO. 3D	P4-20	52-71-00
12	FWD SMOKE DET	P6-24	P8-55	1A22-18 GND	FE/SO NO. 3D	P13-40	52-71-00
13	LH EMERGENCY	P6-24	P8-56	1A22-19 GND	FE/SO NO. 3D	P13-44	52-71-00
14	ESCAPE HATCH	P6-24	P8-61	1A26-22 GND	FE/SO NO 3D	P4-37	52-71-00
15	RH EMERGENCY	P6-24	P8-57	1A26-20 GND	FE/SO NO. 3D	P13-45	52-71-00
16	AFT S DUCT	P17-13	P22-26	1A8-19 GND	FE/SO NO. 4C	P2-34	52-71-00
17	LH GEAR DOOR	P6-53	P8-19	1A33-5 POS	FE/SO NO. 1A	P1-41	32-61-00
18	NOSE GEAR DOOR	P6-23	P19-22	1A33-1 POS	FE/SO NO. 3C	P13-48	32-61-00
19	RH GEAR DOOR	P6-23	P20-20	1A33-6 POS	FE/SO NO 3C	P13-32	32-61-00
20	MAIN ELEC	P6-24	P8-32	1A31-23 GND	FE/SO NO. 3D	P13-43	52-71-00
21	SLAT ASYM DET FAULT	P6-53	P8-20	1A15-1 POS	FE/SO NO 1A	P4-39	27-81-00
22	TAIL SKID	P6-19	P20-1	1A13-3 POS	FE/SO NO. 3B	P4-5	32-71-00
23	BLEED DUCT OVPRESS	P6-60	P20-6	1A27-16 POS	FE/SO NO 2A	P4-7	36-11-00
24	SPARE	P17-12	— — —	1A8-3 POS	FE/SO NO 4B	— — —	
25	FLAP/SLAT LOCK	P6-23	P19-47	1A33-2 POS	FE/SO NO. 3C	P4-38	27-81-00
26	WATER CPRSR 1	P17-11	P8-14	1A10-10 POS	FE/SO NO 4A	P1-60	38-41-00
27	WATER LINE HTR	P17-12	P22-41	1A5-14 POS	FE/SO NO 4B	P3-55	30-11-00
28	FLAP ASYM DET FAULT	P6-53	P8-6	1A33-4 POS	FE/SO NO 1A	P4-41	27-81-00
29	WATER CPRSR 2	P17-11	P8-16	1A10-11 POS	FE/SO NO 4A	P1-61	38-41-00
30	ELEVATOR	P6-15	P13-5	1A8-8 POS	FE/SO NO 3A	P2-61	27-31-00
31	SPARE	P18-3	— — —	1A35 GND	FE/SO NO. 1E	P3-51	33-17-00
32	PILOT INSTR COOL SYS	P6-24	P18-9	1A28-20 GND	FE/SO NO. 3D	P4-26	21-20-00

M1-0001-33-1384

R Indicator Signals - Slat Monitor, Aural Warning Test
R and Annunciator Panels
R Figure 121



ELECTRICAL PANEL							
IND NO.	LEGEND	BOX TEST INPUT CONN & PIN NO.	BOX SIGNAL INPUT CONN & PIN NO	CARD DRIVER AND INPUT SIG	TEST RELAY TITLE & PINS	BOX OUTPUT CONN & PIN NO.	ATA REF.
1	OFF	P6-55	P8-16	1A17 A 05	FE/SO NO 1C	P1-19	24-61-00
2	OFF	P6-56	P12-17	1A22 9 POS	FE/SO NO 1C	P3-13	24-61-00
3	OFF	P17-6	P20-16	1A17 8 POS	FE/SO NO 5B	P12-13	24-61-00
4	LOW PRESS	P6-25	P22-14	1A7 25 GND	FE/SO NO 3E	P1-9	24-11-00
5	LOW PRESS	P6-25	P10-17	1A17 17 GND	FE/SO NO 3E	P3-8	24-11-00
6	LOW PRESS	P6-25	P21-14	1A7-19 GND	FE/SO NO 3E	P12-9	24-11-00
7	OVHT	P6-15	P19-53	1A26 14 POS	FE/SO NO. 3A	P4-3	24-14-00
8	PRESS	P6-55	P10-34	1A8 15 POS	FE/SO NO. 1C	P3-67	24-14-00
9	FLOWBAR	P6-25	P19-28	1A10 25 GND	FE/SO NO 2E	P3-81	24-20-00 ⚠1
10	OPEN	P6-26	P19-27	1A10 24 GND	FE/SO NO 3E	P3-80	24-20-00 ⚠1
11	DIFF	P6-25	P19-26	1A10 23 GND	FE/SO NO 3E	P3-69	24-20-00
12	FLOWBAR	P6-25	P8-13	1A10 21 GND	FE/SO NO 3E	P1-17	24-20-00
13	OPEN	P6-25	P8-12	1A7 25 GND	FE/SO NO 3E	P1-18	24-20-00
14	DIFF	P6-25	P9-11	1A8 21 GND	FE/SO NO. 3E	P1-15	24-20-00
15	FLOWBAR	P6-25	P19-14	1A10 16 GND	FE/SO NO 3E	P3-17	24-20-00
16	OPEN	P6-25	P19-13	1A10 17 GND	FE/SO NO. 3E	P3-16	24-20-00
17	DIFF	P6-25	P19-12	1A10 22 GND	FE/SO NO 3E	P3-15	24-20-00
18	FLOWBAR	P6-25	P20-13	1A7 18 GND	FE/SO NO 3E	P12-17	24-20-00
19	OPEN	P6-25	P20-12	1A7 17 GND	FE/SO NO. 3E	P12-16	24-20-00
20	DIFF	P6-25	P20-11	1A7 22 GND	FE/SO NO 3E	P12-15	24-20-00
21	FLOWBAR	P6-55	P19-30	1A22 12 POS	FE/SO NO. 1C	P4-60	24-20-00
22	OPEN	P6-55	P19-29	1A22 11 POS	FE/SO NO. 1C	P4-59	24-20-00
23	FLOWBAR	P6-55	P8-15	1A17 6 POS	FE/SO NO 1C	P1-12	24-20-00
24	OPEN	P6-55	P8-14	1A17 2 POS	FE/SO NO 1C	P1-11	24-20-00
25	FLOWBAR	P6-55	P19-16	1A22 7 POS	FE/SO NO 1C	P3-12	24-20-00
26	OPEN	P6-55	P19-15	1A22 5 POS	FE/SO NO 1C	P3-11	24-20-00
27	FLOWBAR	P17-6	P20-15	1A17 7 POS	FE/SO NO 5B	P12-12	24-20-00
28	OPEN	P17-6	P20-14	1A17 5 POS	FE/SO NO 5B	P12-11	24-20-00
29	FLT STA BUS FAIL	P6-53	P6-1	1A33 13 POS	FE/SO NO. 1A	P1-21	24-61-00
30	FLT STA BUS FAIL	P6-55	P17-1	1A28 5 POS	FE/SO NO. 1C	P3-21	24-61-00
31	FLT STA BUS FAIL	P6-56	P16-1	1A28 3 POS	FE/SO NO. 1C	P12-21	24-61-00
32	ON	P17-6	P19-32	1A17 3 POS	FE/SO NO 5B	P2-23	24-61-00
33	AVAIL	P6-56	P18-58	1A22 3 POS	FE/SO NO 1C	P2-22	24-61-00
34	FLOWBAR	P6-55	P8-17	1A13 13 POS	FE/SO NO. 1C	P1-14	24-20-00
35	OPEN	P6-55	P8-9	1A17 1 POS	FE/SO NO 1C	P1-10	24-20-00
36	FLOWBAR	P6-55	P19-18	1A22 10 POS	FE/SO NO. 1C	P3-14	24-20-00
37	OPEN	P6-55	P19-10	1A22 4 POS	FE/SO NO 1C	P3-10	24-20-00
38	FLOWBAR	P17-6	P20-17	1A17-10 POS	FE/SO NO. 5B	P12-14	24-20-00
39	OPEN	P17-6	P20-9	1A17 4 POS	FE/SO NO. 5B	P12-10	24-20-00
40	OPEN	P6-55	P18-13	1A28 7 POS	FE/SO NO. 1C	P13-50	24-31-00
41	FAIL	P6-55	P18-18	1A28 10 POS	FE/SO NO 1C	P13-49	24-32-00
42	FAIL	P6-55	P18-14	1A28 8 POS	FE/SO NO 1C	P13-16	24-32-00
43	FAIL	P6-55	P6-27	1A33 14 POS	FE/SO NO 1C	P1-35	24-53-00
44	FAIL	P6-55	P18-19	1A28 11 POS	FE/SO NO. 1C	P13-15	24-31-00
45	ESS AC ALTN	P6-55	P16-28	1A28 4 POS	FE/SO NO 1C	P1-36	24-53-00
46	FLOWBAR	P17-12	P17-55	1A28 14 POS	FE/SO NO 5B	P2-4	24-32-00
47	ON	P6-55	P10-35	1A8-16 POS	FE/SO NO. 1C	P3-58	24-32-00

NOTE

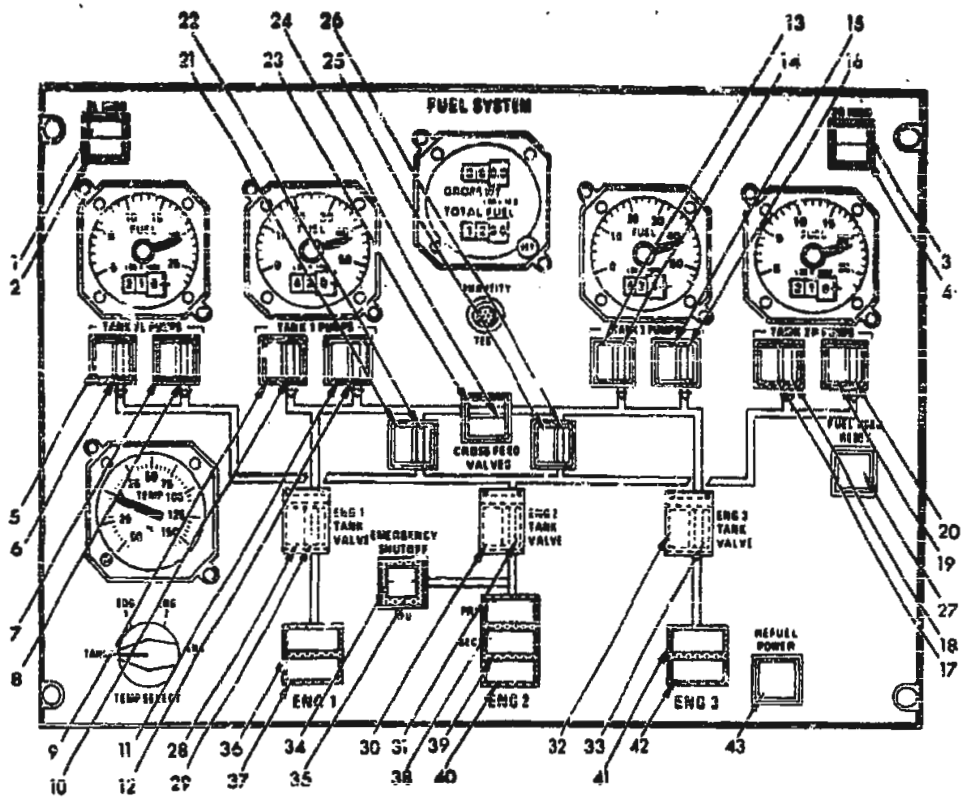
⚠1 APU MASTER POWER SWITCH, LOCATED ON THE APU CONTROL PANEL, MUST BE ON WHEN TESTING THESE SWITCHLIGHTS

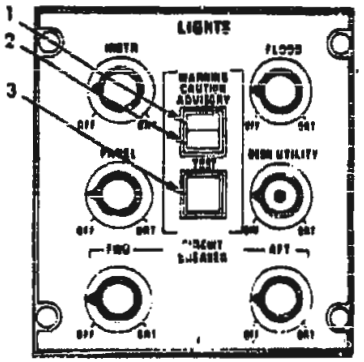
M1-0001-33-1260

R Indicator Signals - Electrical System Panel
R Figure 122

EFFECTIVITY: ALL

0078

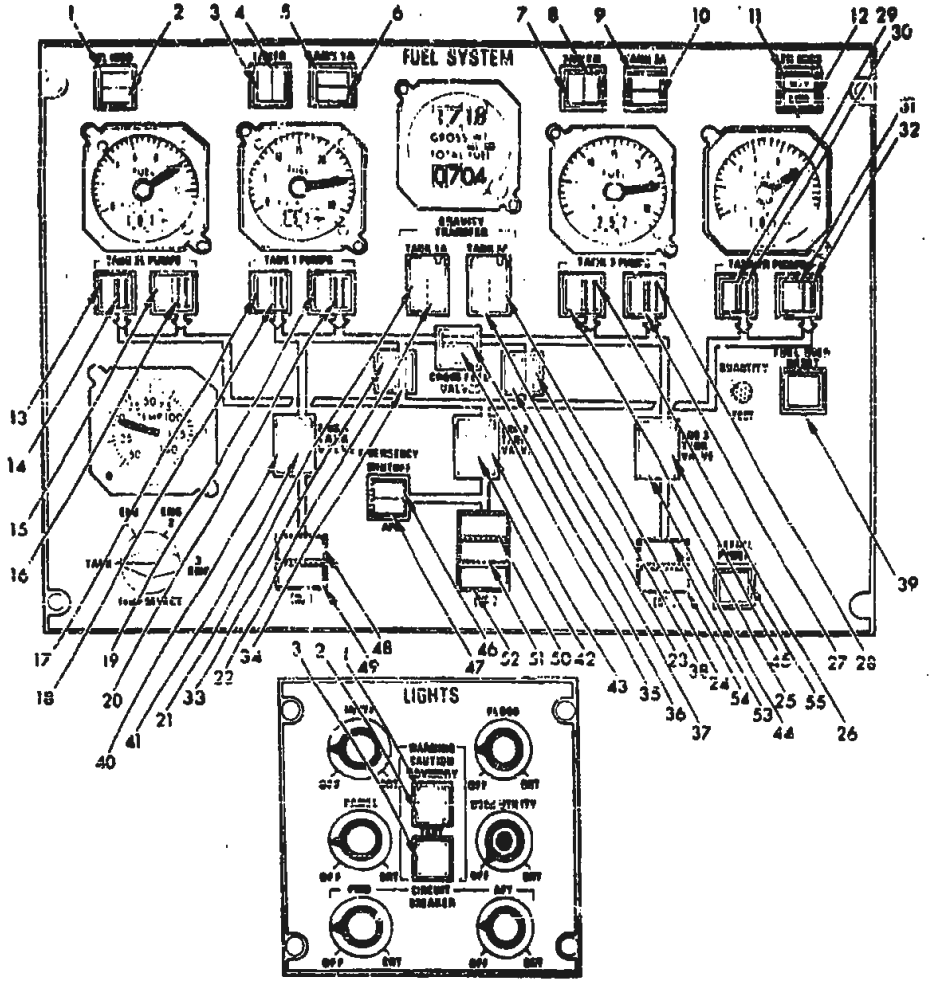




FUEL SYSTEM PANEL							
IND NO.	LEGEND	BOX TEST INPUT CONN & PIN NO.	BOX SIGNAL INPUT CONN AND PIN NO.	CARD DRIVER AND INPUT SIG	TITLE AND PINS TEST RELAY	BOX OUTPUT CONN & PIN NO.	ATA REF.
1	QTY	P3-52	P3-52	1A2-A POS	FE/50 NO. 6D	P18-2	28-41-00
2	LOW	P6-50	P18-46	1A24-11 POS	FE/50 NO. 2A	P2-20	28-41-00
3	QTY	P3-52	P3-52	1A3-A POS	FE/50 NO. 4D	P18-2	28-41-00
4	LOW	P6-50	P18-48	1A24-12 POS	FE/50 NO. 2A	P2-20	28-41-00
5	LOW	P6-50	P 7-48	1A24-7 POS	FE/50 NO. 2A	P2-19	28-34-00
6	FLOW BAR	P3-52	P3-52	1A2-A POS	FE/50 NO. 4D	P18-2	28-34-00
7	LOW	P6-50	P17-46	1A24-8 POS	FE/50 NO. 2A	P2-20	28-34-00
8	FLOW BAR	P3-52	P3-52	1A3-A POS	FE/50 NO. 4D	P18-2	28-34-00
9	LOW	P6-50	P22-47	1A5-16 POS	FE/50 NO. 2A	P2-21	28-34-00
10	FLOW BAR	P3-52	P3-52	1A2-A POS	FE/50 NO. 4D	P18-2	28-34-00
11	LOW	P6-50	P22-48	1A6-16 POS	FE/50 NO. 2A	P2-20	28-34-00
12	FLOW BAR	P3-52	P3-52	1A2-A POS	FE/50 NO. 4D	P18-2	28-34-00
13	LOW	P6-50	P18-42	1A24-4 POS	FE/50 NO. 2A	P19-53	28-34-00
14	FLOW BAR	P3-52	P3-52	1A2-A POS	FE/50 NO. 4D	P18-2	28-34-00
15	LOW	P6-50	P18-43	1A24-5 POS	FE/50 NO. 2A	P19-54	28-34-00
16	FLOW BAR	P3-52	P3-52	1A2-A POS	FE/50 NO. 4D	P18-2	28-34-00
17	LOW	P6-50	P18-39	1A24-6 POS	FE/50 NO. 2A	P4-56	28-34-00
18	FLOW BAR	P3-52	P3-52	1A2-A POS	FE/50 NO. 4D	P18-2	28-34-00
19	LOW	P6-50	P18-34	1A24-2 POS	FE/50 NO. 2A	P4-57	28-34-00
20	FLOW BAR	P3-52	P3-52	1A2 A POS	FE/50 NO. 4D	P18-2	28-34-00
21	BLUE	P6-50	P22-46	1A5-9 POS	FE/50 NO. 2A	P2-19	28-34-00
22	FLOW BAR	P3-52	P3-52	1A2-A POS	FE/50 NO. 4D	P18-2	28-34-00
23	BLUE	P6-50	P19-37	1A24-10 POS	FE/50 NO. 2A	P2-17	28-34-00
24	FLOW BAR	P3-52	P3-52	1A2-A POS	FE/50 NO. 4D	P18-2	28-34-00
25	BLUE	P6-50	P18-38	1A24-3 POS	FE/50 NO. 2A	P2-19	28-34-00
26	FLOW BAR	P3-52	P3-52	1A2-A POS	FE/50 NO. 4D	P18-2	28-34-00
27	AMBER	P3-52	P3-52	1A2-A POS	FE/50 NO. 4D	P18-2	28-34-00
28	BLUE	P6-50	P22-43	1A6-8 POS	FE/50 NO. 2A	P1-19	28-34-00
29	FLOW BAR	P3-52	P3-52	1A2-A POS	FE/50 NO. 4D	P18-2	28-34-00
30	BLUE	P6-50	P10-50	1A22-15 POS	FE/50 NO. 2A	P3-19	28-34-00
31	FLOW BAR	P3-52	P3-52	1A2 A POS	FE/50 NO. 4D	P18-2	28-34-00
32	BLUE	P6-50	P18-28	1A24-9 POS	FE/50 NO. 2A	P13-19	28-34-00
33	FLOW BAR	P3-52	P3-52	1A2-A POS	FE/50 NO. 4D	P18-2	28-34-00
34	PRI	P6-50	P10-30	1A7-1 POS	FE/50 NO. 2A	P4-44	49-11-00
35	SEC	P6-50	P10-31	1A7-2 POS	FE/50 NO. 2A	P4-45	49-11-00
36	EMERGENCY SHUTOFF	P6-50	P22-19	1A6-2 POS	FE/50 NO. 2A	P1-19	28-34-00
37	FUEL PRESSURE	P6-7	P7-5	1A15-22 GND	FE/50 NO. 2E	P1-6	73-31-00
38	EMERGENCY SHUTOFF	P6-50	P10-43	1A7-9 POS	FE/50 NO. 2A	P3-19	28-34-00
39	EMERGENCY SHUTOFF	P6-50	P10-42	1A7-8 POS	FE/50 NO. 2A	P4-5	28-34-00
40	FUEL PRESSURE	P6-7	P10-14	1A17 20 GND	FE/50 NO. 2L	P3-6	73-31-00
41	EMERGENCY SHUTOFF	P6-50	P21-11	1A6-1 POS	FE/50 NO. 2A	P13-19	28-34-00
42	FUEL PRESSURE	P6-7	P21-13	1A15 20 GND	FE/50 NO. 2E	P12-6	73-31-00
43	ON	P3-52	- - -	1A2-A POS	FE/50 NO. 4D	P18-2	28-21-00

LIGHTS PANEL							
IND NO.	LEGEND	BOX TEST INPUT CONN & PIN NO.	BOX SIGNAL INPUT CONN AND PIN NO.	CARD DRIVER AND INPUT SIG	TITLE AND PINS TEST RELAY	BOX OUTPUT CONN & PIN NO.	ATA REF.
1	BRT	P3-52	P3-52	1A2-A POS	FE/50 NO. 4D	P18-2	33-17-00
2	DIM	P3-52	P3-52	1A2-A POS	FE/50 NO. 4D	P18-2	33-17-00
3	ON	P3-52	P3-52	1A2-A POS	- - - -	P18-2	33-17-00

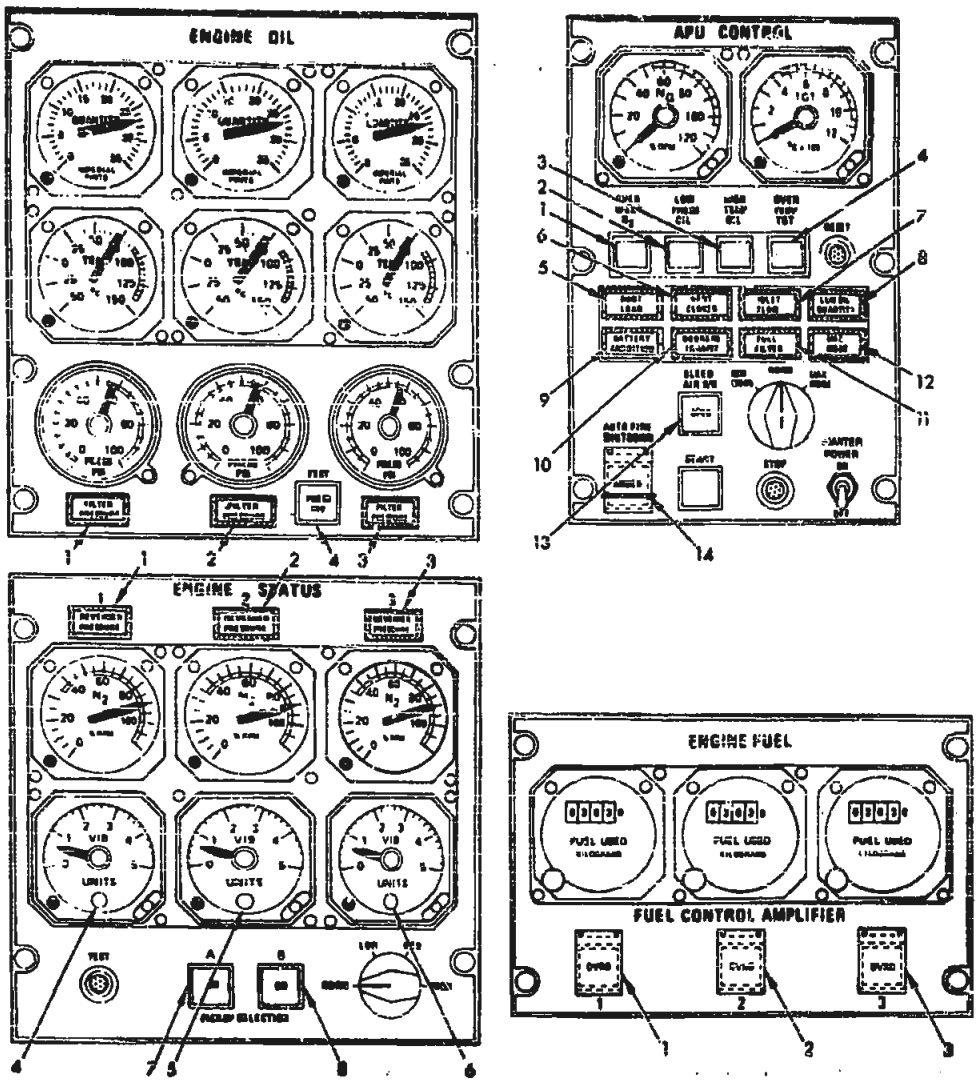
Indicator Signals - Fuel System and Lights Panels
Figure 123



FUEL SYSTEM PANEL							
IND NO	LEGEN	BOX TEST INPUT CONN & PIN NO.	BOX SIGNAL INPUT CONN & PIN NO	CARD DRIVER AND INPUT SIG	TEST RELAY TITLE AND PINS	BOX OUTPUT CONN & PIN NO.	ATA REF
1	QTY	P3-52	P3 52	1A2 A POS	FE/SO NO. 4D	P18-2	28-41-00
2	LOW	P6-59	P19 46	1A24 11 POS	FE/SO NO. 2A	P2-20	28-41-00
3	BLUE	P17 12	P19 40	1A22 8 POS	FE/SO NO. 4C	P4-1	28-27-00
4	XFR	P3-52	P3-52	1A2 A POS	FE/SO NO. 4D	P18-2	28-27-00
5	QTY	P3-52	P3 52	1A2 A POS	FE/SO NO. 4D	P18-2	28-41-00
6	NOT USED						
7	BLUE	P17 12	P19 34	1A22 1 POS	FE/SO NO. 4B	P2-5	28-27-00
8	XFR	P3 52	P3 52	1A2 A POS	FE/SO NO. 4D	P18 2	28-27-00
9	QTY	P3 52	P3 52	1A2 A POS	FE/SO NO. 4D	P18-2	28-41-00
10	NOT USED						
11	QTY	P3 52	P3 52	1A2 A POS	FE/SO NO. 4D	P18-2	28-41-00
12	LOW	P6 59	P19 46	1A24 12 POS	FE/SO NO. 2A	P4 58	28-41-00
13	LOW	P6 59	P19 45	1A24 7 POS	FE/SO NO. 2A	P2 19	28-27-00
14	FLOW BAR	P3 52	P3 52	1A2 A POS	FE/SO NO. 4D	P18-2	28-24-00
15	LOW	P6 59	P17 46	1A24 8 POS	FE/SO NO. 2A	P2 20	28-24-00
16	FLOW BAR	P3 52	P3 52	1A2 A POS	FE/SO NO. 4D	P18-2	28-24-00
17	LOW	P6 59	P22 47	1A5 15 POS	FE/SO NO. 2A	P2 21	28-24-00
18	FLOW BAR	P3 52	P3 52	1A2 A POS	FE/SO NO. 4D	P18-2	28-24-00
19	LOW	P6 59	P22 48	1A5 16 POS	FE/SO NO. 2A	P2 24	28-24-00
20	FLOW BAR	P3 52	P3 52	1A2 A POS	FE/SO NO. 4D	P18-2	28-24-00
21	BLUE	P6 15	P20 34	1A6 12 POS	FE/SO NO. 2A	P4 11	28-27-00
22	XFR	P3 52	P3 52	1A2 A POS	FE/SO NO. 4D	P18-2	28-27-00
23	BLUE	P6 60	P20 35	1A5 4 POS	FE/SO NO. 2B	P4 12	28-27-00
24	XFR	P3 52	P3 52	1A2 A POS	FE/SO NO. 4D	P18 2	28-27-00
25	LOW	P6 59	P18 42	1A24 4 POS	FE/SO NO. 2A	P13 53	28-24-00
26	FLOW BAR	P3 5	P3 52	1A2 A POS	FE/SO NO. 4D	P18 2	28-24-00
27	LOW	P6 [illegible]	[illegible]	1A24 5 POS	FE/SO NO. 2A	P13 54	28-24-00
28	FLOW BAR	P3 52	P3 52	1A2 A POS	FE/SO NO. 4D	P18-2	28-24-00
29	LOW	P6 59	P16 36	1A24 8 POS	FE/SO NO. 2A	P4 56	28-24-00
30	FLOW BAR	P3 52	P3 52	1A2 A POS	FE/SO NO. 4D	P18 2	28-24-00
31	LOW	P6 59	P1 34	1A24 2 POS	FE/SO NO. 2A	P4 57	28-24-00
32	FLOW BAR	P3 52	P3 52	1A2 A POS	FE/SO NO. 4D	P18 2	28-24-00
33	BLUE	P6 59	P22 45	1A6 9 POS	FE/SO NO. 2A	P2 18	28-24-00
34	FLOW BAR	P3 52	P3 52	1A2 A POS	FE/SO NO. 4D	P18 2	28-24-00
35	BLUE	P6 59	P19 37	1A24 10 POS	FE/SO NO. 2A	P2 17	28-24-00
36	FLOW BAR	P3 52	P3 52	1A2 A POS	FE/SO NO. 4D	P18 2	28-24-00
37	BLUE	P6 59	P16 39	1A24 3 POS	FE/SO NO. 2A	P2 18	28-24-00
38	FLOW BAR	P3 52	P3 52	1A2 A POS	FE/SO NO. 4D	P18-2	28-24-00
39	AMBER	P3 52	P3 52	1A2 A POS	FE/SO NO. 4D	P18-2	28-24-00
40	BLUE	P6 59	P22 43	1A5 6 POS	FE/SO NO. 2A	P1 19	28-24-00
41	FLOW BAR	P3 52	P3 52	1A2 A POS	FE/SO NO. 4D	P18-2	28-24-00
42	BLUE	P6 59	P10 50	1A22 15 POS	FE/SO NO. 2A	P2 19	28-24-00
43	FLOW BAR	P3 52	P3 52	1A2 A POS	FE/SO NO. 4D	P18-2	28-24-00
44	BLUE	P6 59	P18 38	1A24 9 POS	FE/SO NO. 2A	P19-19	28-24-00
45	FLOW BAR	P3 52	P3 52	1A2 A POS	FE/SO NO. 4D	P18-2	28-24-00
46	PRI	P6 59	P10 30	1A7 1 POS	FE/SO NO. 2A	P4 44	49-11-00
47	SEC	P6 58	P10 31	1A7 2 POS	FE/SO NO. 2A	P4 45	49-11-00
48	EMERGENCY SHUTOFF	P6 59	P22 19	1A5 2 POS	FE/SO NO. 2A	P1 18	28-24-00
49	FUEL PRESSURE	P6-7	P22 5	1A15 22 GND	FE/SO NO. 2E	P16	73-31-00
50	EMERGENCY SHUTOFF	P6 59	P10 43	1A7 9 POS	FE/SO NO. 2A	P3-18	28-24-00
51	EMERGENCY SHUTOFF	P6 59	P10 42	1A7 8 POS	FE/SO NO. 2A	P44	28-24-00
52	FUEL PRESSURE	P6 7	P10 14	1A17 20 GND	FE/SO NO. 2E	P2E	73-31-00
53	EMERGENCY SHUTOFF	P6 59	P21 11	1A5 1 POS	FE/SO NO. 2A	P12-19	28-24-00
54	FUEL PRESSURE	P6 7	P21 13	1A15 20 GND	FE/SO NO. 2E	P12-9	73-31-00
55	ON	P3-52	----	1A2 A POS	FE/SO NO. 4D	P18-2	28-21-00

LIGHTS PANEL							
IND NO	LEGEND	BOX TEST INPUT CONN & PIN NO.	BOX OUTPUT CONN & PIN NO.	CARD DRIVER AND INPUT SIG	TEST RELAY TITLE AND PINS	BOX OUTPUT CONN & PIN NO	ATA REF.
1	BRT	P3-52	P3-52	1A2 A POS	FE/SO NO. 4D	P18-2	33-17-00
2	DIM	P3-52	P3-52	1A2 A POS	FE/SO NO. 4D	P18-2	33-17-00
3	ON	P3-52	P3-52	1A2 A POS	----	P18-2	33-17-00

Indicator Signals - Fuel System and Lights Panels
Figure 123



Indicator Signals - Engine Oil, Status, Fuel, and APU Control Panels
Figure 124

ENGINE OIL PANEL							
IDENT NO.	LEGEND	BOX TEST INPUT CONN & PIN NO.	BOX SIGNAL INPUT CONN & PIN NO.	CARD DRIVER AND INPUT SIG	TEST RELAY TITLE & PINS	BOX OUTPUT CONN & PIN NO.	ATA REF.
1	FILTER PRESSURE	P6-26	P22-4	1A6-20 GND	FE/SO NO. 3F	P1-6	79-31-00
2	FILTER PRESSURE	P6-26	P10-[illegible]	1A15-18 GND	FE/SO NO. 3F	P2-6	79-31-00
3	FILTER PRESSURE	P6-26	P21-12	1A6-22 GND	FE/SO NO. 3F	P12-6	79-31-00
4	PRESS IND	P3-52	P3-52	1A2-A POS	FE/SO NO. 4D	P18-2	79-31-00

APU CONTROL PANEL							
IDENT NO.	LEGEND	BOX TEST INPUT CONN & PIN NO.	BOX SIGNAL INPUT CONN & PIN NO.	CARD DRIVER AND INPUT SIG	TEST RELAY TITLE & PINS	BOX OUTPUT CONN & PIN NO.	ATA REF.
1	FLAG	---	---	---	---	---	49-11-00
2	FLAG	---	---	---	---	---	49-11-00
3	FLAG ⚠1	---	---	---	---	---	49-11-00
4	FLAG	---	---	---	---	---	49-11-00
5	DONT LOAD	P6-40	P10-47	1A7-11 POS	FE/SO NO. 7B	P1-53	49-61-00
6	VENT CLOSED	P6-60	P10-13	1A7-5 POS	FE/SO NO. 2B	P4-34	49-11-00
7	INLET FLOW	P6-60	P10-45	1A7-8 POS	FE/SO NO. 7B	P4-48	49-11-00
8	LOW OIL QUANTITY	P6-60	P10-44	1A7-7 POS	FE/SO NO. 2B	P4-47	49-11-00
9	BATTERY CONDITION	P6-60	P6-31	1A7-3 POS	FE/SO NO. 2B	P3-44	24-32-00
10	DOORS IN TRANSIT	P6-60	P10-[illegible]	1A7-4 POS	FE/SO NO. 2B	P4-46	49-11-00
11	FUEL FILTER	P6-60	P10-46	1A7-10 POS	FE/SO NO. 2B	P4-49	49-11-00
12	MAX MODE	P17-12	P6-22	1A6-4 POS	FE/SO NO. 4B	P18-20	49-11-00
13	OPEN	P6-64	P10-23	1A6-3 POS	FE/SO NO. 1B	P3-56	49-11-00
14	ARMED	P6-60	P19-33	1A26-11 POS	FE/SO NO. 2B	P4-39	49-11-00

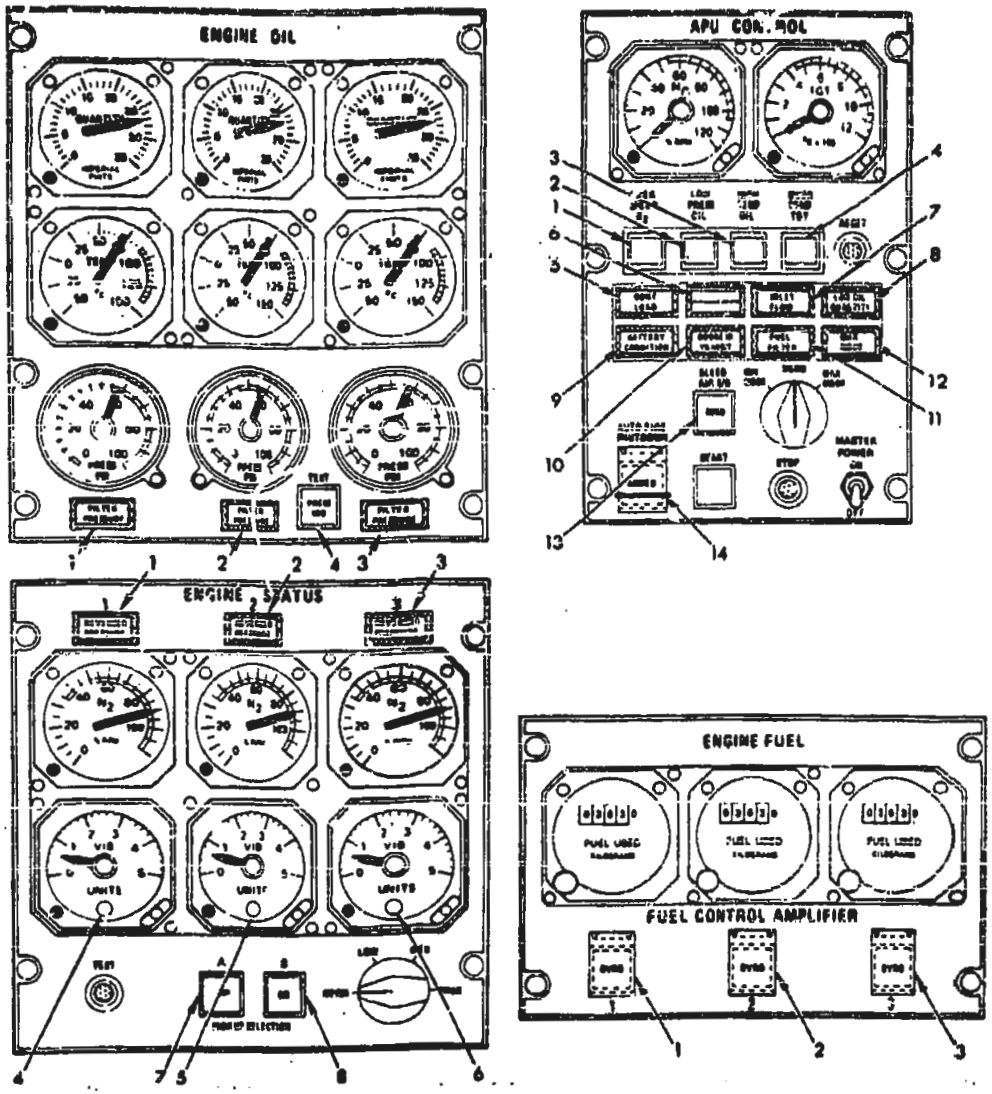
ENGINE STATUS PANEL							
IDENT NO.	LEGEND	BOX TEST INPUT CONN & PIN NO.	BOX SIGNAL INPUT CONN & PIN NO.	CARD DRIVER AND INPUT SIG	TEST RELAY TITLE & PINS	BOX OUTPUT CONN & PIN NO.	ATA REF.
1	REVERSER PRESSURE	P6-60	P6-29	1A26-3 POS	FE/SO NO. 3B	P1-7	---
2	REVERSER PRESSURE	P6-60	P19-23	1A26-10 POS	FE/SO NO. 2B	P3-7	---
3	REVERSER PRESSURE	P6-60	P20-26	1A6-3 POS	FE/SO NO. 2B	P12-7	---
4	AMBER	P6-26	P6-44	1A15-21 GND	FE/SO NO. 1F	P1-50	77-31-00
5	AMBER	P6-26	P3-54	1A15-17 GND	FE/SO NO. 1F	P3-20	77-31-00
6	AMBER	P6-26	P6-39	1A8-21 GND	FE/SO NO. 1F	P12-20	77-31-00
7	ON	P3-52	P3-52	1A2-A POS	FE/SO NO. 4D	P18-3	77-31-00
8	ON	P3-52	P3-52	1A2-A POS	FE/SO NO. 4D	P18-7	77-31-00

ENGINE FUEL PANEL							
IDENT NO.	LEGEND	BOX TEST INPUT CONN & PIN NO.	BOX SIGNAL INPUT CONN & PIN NO.	CARD DRIVER AND INPUT SIG	TEST RELAY TITLE & PINS	BOX OUTPUT CONN & PIN NO.	ATA REF.
1	OVRD	P3-52	P3-52	1A2-A POS	FE/SO NO. 4D	P18-2	73-21-00
2	OVRD	P3-52	P3-52	1A2-A POS	FE/SO NO. 4D	P18-2	73-21-00
3	OVRD	P3-52	P3-52	1A2-A POS	FE/SO NO. 4D	P18-2	73-21-00

NOTE

⚠1 FLAGS ARE SET BY PRESSING THE TEST SW ON THE FE/SO LIGHTS PANEL AND RESET BY PRESSING THE RESET SWITCH ON THE APU CONTROL PANEL

M1-0000-33-1300



ENGINE OIL PANEL							
IDENT NO.	LEGEND	BOX TEST INPUT CONN & PIN NO.	BOX SIGNAL INPUT CONN & PIN NO.	CARD DRIVER AND INPUT SIG	TEST RELAY TITLE & PINS	BOX OUTPUT CONN & PIN NO.	ATA REF.
1	FILTER PRESSURE	P6-26	P22-4	1A6-20 GND	FE/SO NO. 3F	P1-6	79-31-00
2	FILTER PRESSURE	P6-26	P10-13	1A15-19 GND	FE/SO NO. 3F	P3-6	79-31-00
3	FILTER PRESSURE	P6-26	P21-12	1A6-22 GND	FE/SO NO. 3F	P12-6	79-31-00
4	PRESS IND	P3-52	P3-52	1A2-A POS	FE/SO NO. 4D	P18-2	79-31-00

APU CONTROL PANEL							
IDENT NO.	LEGEND	BOX TEST INPUT CONN & PIN NO.	BOX SIGNAL INPUT CONN & PIN NO.	CARD DRIVER AND INPUT SIG	TEST RELAY TITLE & PINS	BOX OUTPUT CONN & PIN NO.	ATA REF.
1	FLAG (1)	---	---	---	---	---	49-11-00
2	FLAG (1)	---	---	---	---	---	49-11-00
3	FLAG (1)	---	---	---	---	---	49-11-00
4	FLAG (1)	---	---	---	---	---	49-11-00
5	DONT LOAD	P6-60	P10-47	1A7-11 POS	FE/SO NO. 2B	P4-43	49-81-00
6	(SPARE)	P6-60	---	1A7-5 POS	FE/SO NO. 2B	P4-44	49-11-00
7	INLET FLOW	P6-60	P10-45	1A7-8 POS	FE/SO NO. 2B	P4-45	49-11-00
8	LOW OIL QUANTITY	P6-60	P10-44	1A7-7 POS	FE/SO NO. 2B	P4-46	49-11-00
9	BATTERY CONDITION	P6-60	P8-31	1A7-3 POS	FE/SO NO. 2B	P3-44	24-32-00
10	DOORS IN TRANSIT	P6-60	P10-32	1A7-4 POS	FE/SO NO. 2B	P4-48	49-11-00
11	FUEL FILTER	P6-60	P10-46	1A7-10 POS	FE/SO NO. 2B	P4-49	49-11-00
12	MAX MODE	P17-12	P9-27	1A8-4 POS	FE/SO NO. 4B	P18-2B	49-11-00
13	OPEN	P6-54	P10-28	1A8-6 POS	FE/SO NO. 1B	P3-58	49-11-00
14	ARMED	P6-60	P19-33	1A26-11 POS	FE/SO NO. 2B	P4-38	49-11-00

ENGINE STATUS PANEL							
IDENT NO.	LEGEND	BOX TEST INPUT CONN & PIN NO.	BOX SIGNAL INPUT CONN & PIN NO.	CARD DRIVER AND INPUT SIG	TEST RELAY TITLE & PINS	BOX OUTPUT CONN & PIN NO.	ATA REF.
1	REVERSER PRESSURE	P6-60	P6-28	1A26-3 POS	FE/SO NO. 2B	P1-7	---
2	REVERSER PRESSURE	P6-60	P19-23	1A26-10 POS	FE/SO NO. 2B	P3-7	---
3	REVERSER PRESSURE	P6-60	P20-28	1A5-3 POS	FE/SO NO. 2B	P12-7	---
4	AMBER	P6-26	P8-44	1A15-21 GND	FE/SO NO. 1F	P1-20	77-31-00
5	AMBER	P6-26	P8-64	1A15-17 GND	FE/SO NO. 1F	P3-20	77-31-00
6	AMBER	P6-26	P8-39	1A8-21 GND	FE/SO NO. 1F	P12-20	77-31-00
7	ON	P3-52	P3-52	1A2-A POS	FE/SO NO. 4D	P18-2	77-31-00
8	ON	P3-52	P3-52	1A2-A POS	FE/SO NO. 4D	P18-2	77-31-00

ENGINE FUEL PANEL							
IDENT NO.	LEGEND	BOX TEST INPUT CONN & PIN NO.	BOX SIGNAL INPUT CONN & PIN NO.	CARD DRIVER AND INPUT SIG	TEST RELAY TITLE & PINS	BOX OUTPUT CONN & PIN NO.	ATA REF.
1	OVRD	P3-52	P3-52	1A2-A POS	FE/SO NO. 4D	P18-2	73-21-00
2	OVRD	P3-52	P3-52	1A2-A POS	FE/SO NO. 4D	P18-2	73-21-00
3	OVRD	P3-52	P3-52	1A2-A POS	FE/SO NO. 4D	P18-2	73-21-00

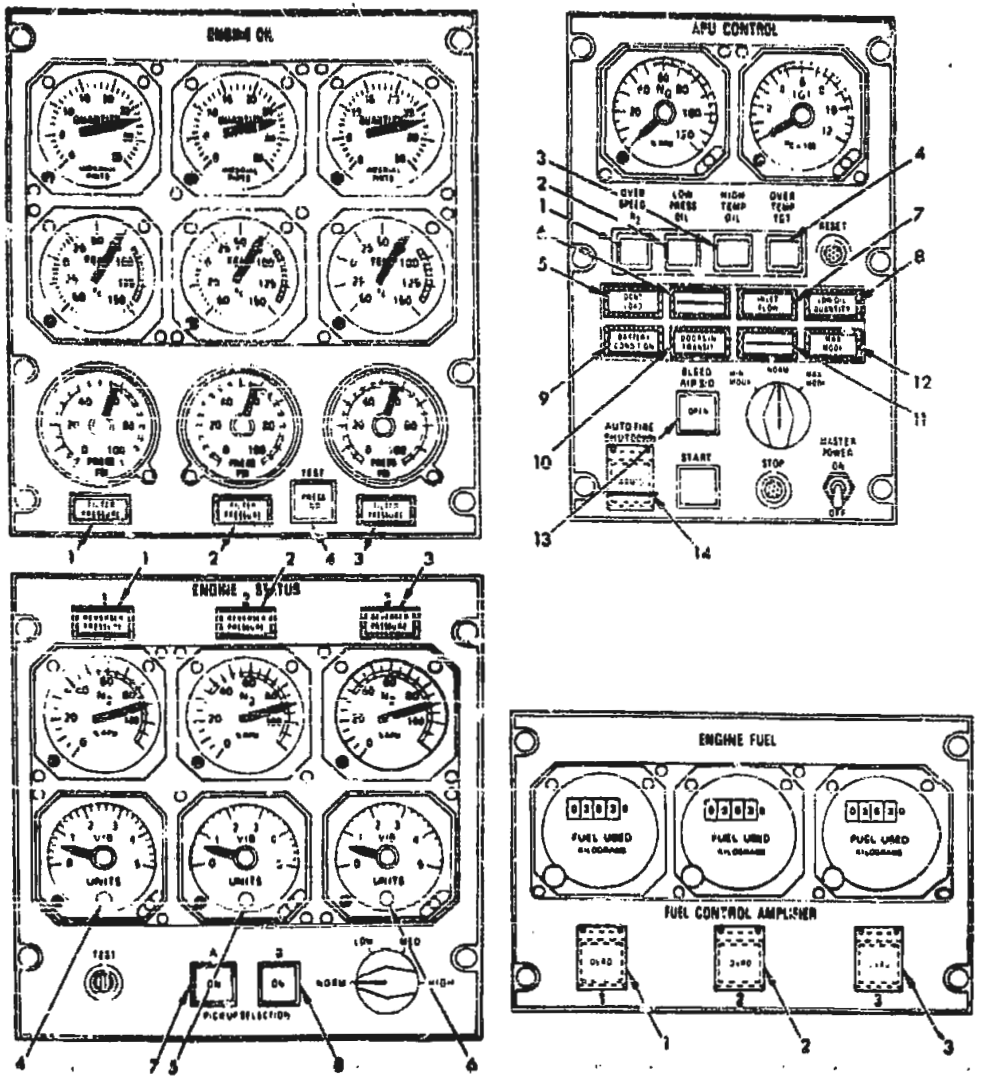
NOTE

(1) FLAGS ARE SET BY PRESSING THE TEST SW ON THE FE/SO LIGHTS PANEL AND RESET BY PRESSING THE RESET SWITCH ON THE APU CONTROL PANEL

M1-0000-33-1014

R Indicator Signals - Engine Oil, Status, Fuel
R and APU Control Panels
R Figure 124

EFFECTIVITY: 001-031 WITH SB49-053



ENGINE OIL PANEL							
IDENT NO.	LEGEND	BOX TEST INPUT CONN & PIN NO.	BOX SIGNAL INPUT CONN & PIN NO.	CARD DRIVER AND INPUT SIG	TEST RELAY TITLE & PINS	BOX OUTPUT CONN & PIN NO.	ATA REF.
1	FILTER PRESSURE	P6-28	P22-4	1A6-20 GND	FE/SO NO. 3F	P1A	79-31-00
2	FILTER PRESSURE	P6-28	P10-13	1A..8-19 GND	FE/SO NO. 3F	P3-5	79-31-00
3	FILTER PRESSURE	P6-28	P21-12	1A6-22 GND	FE/SO NO. 3F	P1E-5	79-31-00
4	PRESS IND	P3-52	P3-52	1A2-A POS	FE/SO NO. 4D	P1B-2	79-31-00

APU CONTROL PANEL							
IDENT NO.	LEGEND	BOX TEST INPUT CONN & PIN NO.	BOX SIGNAL INPUT CONN & PIN NO.	CARD DRIVER AND INPUT SIG	TEST RELAY TITLE & PINS	BOX OUTPUT CONN & PIN NO.	ATA REF.
1	FLAG	---	---	---	---	---	49-11-00
2	FLAG	---	---	---	---	---	49-11-00
3	FLAG (1)	---	---	---	---	---	49-11-00
4	FLAG	---	---	---	---	---	49-11-00
5	DONT LOAD	P6-60	P10-47	1A7-11 POS	FE/SO NO. 2E	P4-33	49-11-00
6	(SPARE)	P6-60	---	1A7-6 POS	FE/SO NO. 2B	P4-34	49-11-00
7	INLET FLOW	P6-60	P10-45	1A7-8 POS	FE/SO NO. 2B	P4-46	49-11-00
8	LOW OIL QUANTITY	P6-60	P10-44	1A7-7 POS	FE/SO NO. 2B	P4-47	49-11-00
9	BATTERY CONDITION	P6-60	P8-31	1A7-3 POS	FE/SO NO. 2B	P2-44	24-32-00
10	DOORS IN TRANSIT	P6-60	P10-22	1A7-4 POS	FE/SO NO. 2B	P4-48	49-11-00
11	(SPARE)	P6-60	---	1A7-10 POS	FE/SO NO. 2B	P4-49	49-11-00
12	MAX MODE	P17-12	P9-37	1A8-4 POS	FE/SO NO. 4B	P1B-29	49-11-00
13	OPEN	P6-54	P10-28	1A8-6 POS	FE/SO NO. 1B	P3-56	49-11-00
14	ARMED	P6-60	P19-33	1A26-11 POS	FE/SO NO. 2B	P4-38	49-11-00

ENGINE STATUS PANEL							
IDENT NO	LEGEND	BOX TEST INPUT CONN & PIN NO	BOX SIGNAL INPUT CONN & PIN NO.	CARD DRIVER AND INPUT SIG	TEST RELAY TITLE & PINS	BOX OUTPUT CONN & PIN NO.	ATA REF.
1	REVERSER PRESSURE	P6-60	P8-28	1A26-1 POS	FE/SO NO. 2B	P1-7	---
2	REVERSER PRESSURE	P6-60	P19-23	1A26-10 POS	FE/SO NO. 2B	P3-7	---
3	REVERSER PRESSURE	P6-60	P20-28	1A8-3 POS	FE/SO NO. 2B	P12-7	---
4	AMBER	P6-28	P8-44	1A15-21 GND	FE/SO NO. 1F	P1-20	77-31-00
5	AMBER	P6-28	P8-54	1A15-17 GND	FE/SO NO. 1F	P3-20	77-31-00
6	AMBER	P6-28	P8-39	1A8-21 GND	FE/SO NO. 1F	P1B-28	77-31-00
7	Grd	P3-52	P3-52	1A2-A POS	FE/SO NO. 4D	P1B-2	77-31-00
8	On	P3-52	P3-52	1A2-A POS	FE/SO NO. 4D	P1B-2	77-31-00

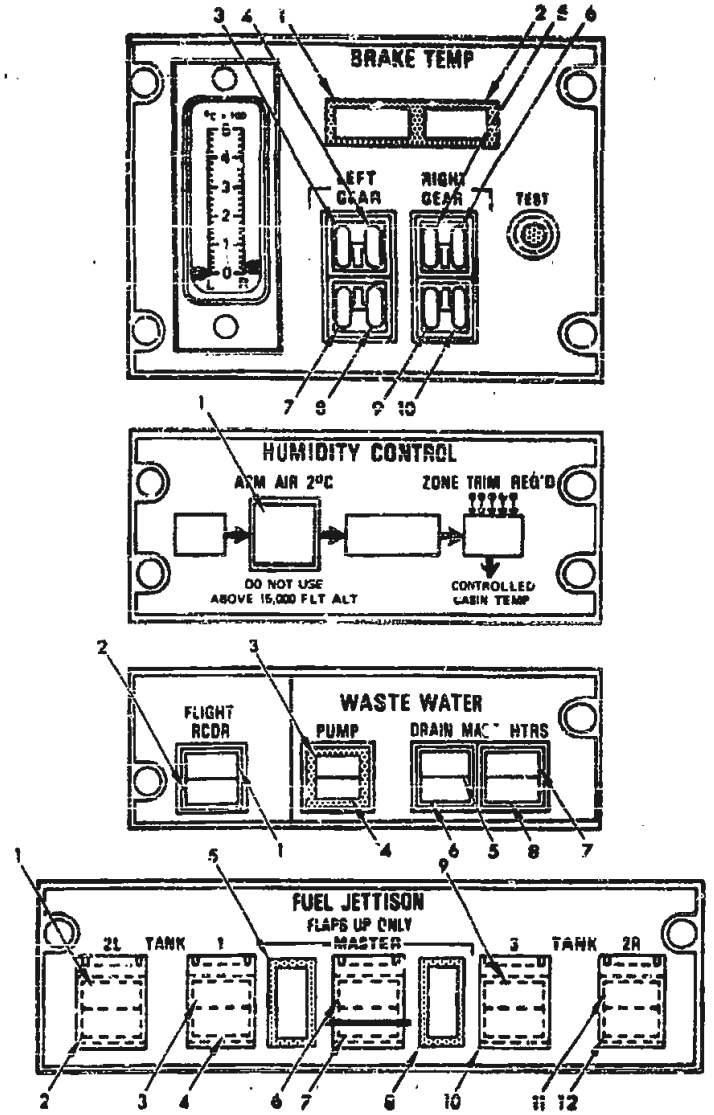
ENGINE FUEL PANEL							
IDENT NO.	LEGEND	BOX TEST INPUT CONN & PIN NO.	BOX SIGNAL INPUT CONN & PIN NO.	CARD DRIVER AND INPUT SIG	TEST RELAY TITLE & PINS	BOX OUTPUT CONN & PIN NO.	ATA REF.
1	OVRD	P3-52	P3-52	1A2-A POS	FE/SO NO. 4D	P1B-2	73-21-00
2	OVRD	P3-52	P3-52	1A2-A POS	FE/SO NO. 4D	P1B-2	73-21-00
3	OVRD	P3-52	P3-52	1A2-A POS	FE/SO NO. 4D	P1B-2	73-21-00

NOTE

(1) FLAGS ARE SET BY PRESSING THE TEST SW ON THE FE/SO LIGHTS PANEL AND RESET BY PRESSING THE RESET SWITCH ON THE APU CONTROL PANEL

M1-0000-33-1072

R Indicator Signals - Engine Oil, Status, Fuel,
R and APU Control Panels
R Figure 124



Indicator Signals - Brake Temperature, Humidity Control, Waste Water and Fuel Jettison Panels
Figure 125

BRAKE TEMP PANEL

IND NO.	LEGEND	BOX TEST INPUT CONN & PIN NO.	BOX SIGNAL INPUT CONN AND PIN NO.	CARD DRIVER AND INPUT SIG	TEST RELAY TITLE AND PINS	BOX OUTPUT CONN & PIN NO.	ATA REF.
1	HIGH TEMP	---	P14-12	1A30-F POS	---	P18-21	32-45-00
2	OVERHEAT	---	P14-12	1A30-F POS	---	P18-21	32-45-00
3	1F	---	P14-12	1A30-F POS	---	P18-21	32-45-00
4	2F	---	P14-12	1A30-F POS	---	P18-21	32-45-00
5	3F	---	P14-12	1A30-F POS	---	P18-21	32-45-00
6	4F	---	P14-12	1A30-F POS	---	P18-21	32-45-00
7	1R	---	P14-12	1A30-F POS	---	P18-21	32-45-00
8	2R	---	P14-12	1A30-F POS	---	P18-21	32-45-00
9	3R	---	P14-12	1A30-F POS	---	P18-21	32-45-00
10	4R	---	P14-12	1A30-F POS	---	P18-21	32-45-00
1	HIGH TEMP	P3-51	---	1A30 POS	FE/SO NO. 1D	P18-3	32-45-00
2	OVERHEAT	P3-51	---	1A30 POS	FE/SO NO. 1D	P18-3	32-45-00
3	1F	P3-51	---	1A30 POS	FE/SO NO. 1D	P18-3	32-45-00
4	2F	P3-51	---	1A30 POS	FE/SO NO. 1D	P18-3	32-45-00
5	3F	P3-51	---	1A30 POS	FE/SO NO. 1D	P18-3	32-45-00
6	4F	P3-51	---	1A30 POS	FE/SO NO. 1D	P18-3	32-45-00
7	1R	P3-51	---	1A30 POS	FE/SO NO. 1D	P18-3	32-45-00
8	2R	P3-51	---	1A30 POS	FE/SO NO. 1D	P18-3	32-45-00
9	3R	P3-51	---	1A30 POS	FE/SO NO. 1D	P18-3	32-45-00
10	4R	P3-51	---	1A30 POS	FE/SO NO. 1D	P18-3	32-45-00

HUMIDITY CONTROL PANEL

IND NO.	LEGEND	BOX TEST INPUT CONN & PIN NO.	BOX SIGNAL INPUT CONN AND PIN NO.	CARD DRIVER AND INPUT SIG	TEST RELAY TITLE AND PINS	BOX OUTPUT CONN & PIN NO.	ATA REF.
1	ON	P3-52	P3-52	1A2-A POS	FE/SO NO. 4D	P18-2	21-00-00

WASTE WATER PANEL

IND NO	LEGEND	BOX TEST INPUT CONN & PIN NO.	BOX SIGNAL INPUT CONN AND PIN NO.	CARD DRIVER AND INPUT SIG	TEST RELAY TITLE AND PINS	BOX OUTPUT CONN & PIN NO.	ATA REF.
1	OFDR	P3-54	P3-54	1A30-K POS	-	P18-11	31-31-00
2	FDAU	P3-54	P3-34	1A30-K POS	FE/SO NO. 5C	P18-11	31-31-00
3	FWD	P8-15	P17-43	1A15-16 POS	FE/SO NO. 3A	P4-3	30-31-00
4	AFT	P8-15	P10-52	1A15-15 POS	FE/SO NO. 3A	P4-25	30-31-00
5	MID 1	P17-7	P18-17	1A33-24 POS	FE/SO NO. 5C	P4-32	30-71-00
6	MID 2	P17-7	P18-4	1A33-19 POS	FE/SO NO. 5C	P4-33	30-71-00
7	AFT 1	P17-7	P18-60	1A33-20 POS	FE/SO NO. 5C	P4-34	30-71-00
8	AFT 2	P17-7	P18-61	1A33-22 POS	FE/SO NO. 5C	P4-35	30-71-00

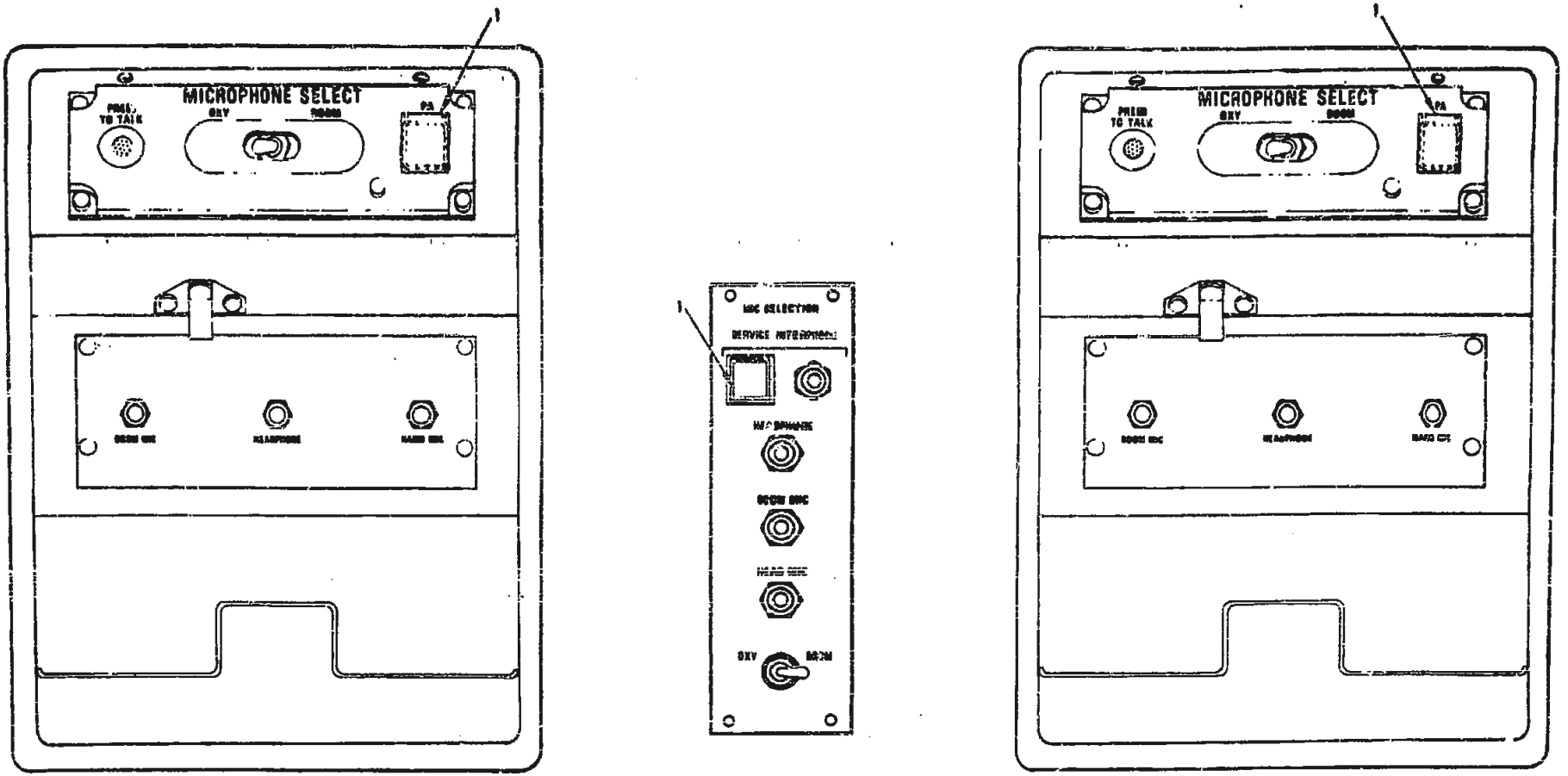
FUEL JETTISON PANEL

IND NO.	LEGEND	BOX TEST INPUT CONN & PIN NO.	BOX SIGNAL INPUT CONN AND PIN NO.	CARD DRIVER AND INPUT SIG	TEST RELAY TITLE AND PINS	BOX OUTPUT CONN & PIN NO.	ATA REF.
1	DUMP	P3-52	P3-52	1A2-A POS	FE/SO NO. 4D	P18-2	28-31-00
2	BLUE	P8-60	P22-50	1A8-12 POS	FE/SO NO. 2B	P2-40	28-31-00
3	DUMP	P3-52	P3-52	1A2-A POS	FE/SO NO. 4D	P18-2	28-31-00
4	BLUE	P8-60	P22-48	1A8-11 POS	FE/SO NO. 2B	P2-41	28-31-00
5	BLUE	P8-60	P22-20	1A8-7 POS	FE/SO NO. 2B	P2-42	28-31-00
6	OPEN	P3-52	P3-52	1A2-A POS	FE/SO NO. 4D	P18-2	28-31-00
7	BLUE	P8-60	P19-38	1A26-12 POS	FE/SO NO. 2B	P2-43	28-31-00
8	BLUE	P8-60	P21-8	1A8-6 POS	FE/SO NO. 2B	P12-56	28-31-00
9	DUMP	P3-52	P3-52	1A2-A POS	FE/SO NO. 4D	P18-2	28-31-00
10	BLUE	P8-60	P18-41	1A26-5 POS	FE/SO NO. 2B	P12-57	28-31-00
11	DUMP	P3-52	P3-52	1A2-A POS	FE/SO NO. 4D	P18-2	28-31-00
12	BLUE	P8-60	P16-36	1A26-4 POS	FE/SO NO. 2B	P12-58	28-31-00

M1-17002-33-884

R
R
007B

EFFECTIVITY: ALL



CAPTAINS MICROPHONE SELECTOR							
IND NO	LEGEND	BOX TEST INPUT CONN & PIN NO	BOX SIGNAL INPUT CONN & PIN NO	CARD DRIVER AND INPUT SIG	TEST RELAY TITLE & PINS	BOX INPUT CONN & PIN NO	ATA REF
1	ON OXY	P17-30	P7 7	1A29-2 POS	PILOTS NO 2B	P5-16	23-51-00

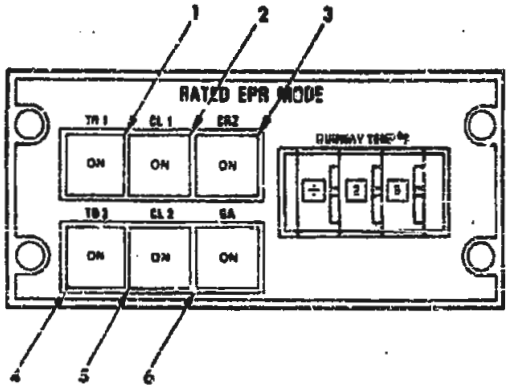
FIRST OFFICERS MICROPHONE SELECTOR							
IND NO	LEGEND	BOX TEST INPUT CONN & PIN NO.	CARD DRIVER AND INPUT SIG	CARD DRIVER AND INPUT SIG	TEST RELAY TITLE & PINS	BOX OUTPUT CONN & PIN NO.	ATA REF.
1	ON OXY	P17-30	P7 13	1A29-6 POS	PILOTS NO 2B	P5-8	23-51-00

FE/SO MIC SELECTION PANEL							
IND NO	LEGEND	BOX TEST INPUT CONN & PIN NO	BOX SIGNAL INPUT CONN & PIN NO	CARD DRIVER AND INPUT SIG	TEST RELAY TITLE & PINS	BOX OUTPUT CONN & PIN NO	ATA REF
1	ON	P3-52	P3-52	1A2-A POS	FE/SO NO. 4D	P18-7	23-43-00

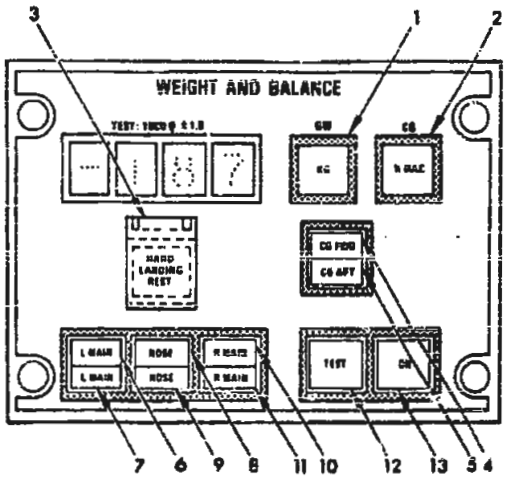
M1-[illegible]-33-00

Indicator Signals - Captains, First Officers and FE/SO Microphone Selector Panels
Figure 126

R EFFECTIVITY: ALL
R
007B



RATED EPR MODE							
IND NO.	LEGEND	BOX TEST INPUT CONN & PIN NO	BOX SIGNAL INPUT CONN & PIN NO.	CARD DRIVER AND INPUT SIG	TEST RELAY TITLE & PINS	BOX OUTPUT CONN & PIN NO.	ATA REF.
1	ON	P21-52	P21-52	1A20 POS	FE/SO NO. 2-F1	P21-54	77-13-00
2	ON	P21-52	P21-52	1A20 POS	FE/SO NO. 2-F1	P21-54	77-13-00
3	ON	P21-52	P21-52	1A20 POS	FE/SO NO. 2-F1	P21-54	77-13-00
4	ON	P21-52	P21-52	1A20 POS	FE/SO NO. 2-F1	P21-54	77-13-00
5	ON	P21-52	P21-52	1A20 POS	FE/SO NO. 2-F1	P21-54	77-13-00
6	ON	P21-52	P21-52	1A20 POS	FE/SO NO. 2-F1	P21-54	77-13-00



2 WEIGHT AND BALANCE PANEL							
IDENT NO.	LEGEND	BOX TEST INPUT CONN & PIN NO	BOX SIGNAL INPUT CONN & PIN NO	CARD DRIVER AND INPUT SIG	TEST RELAY TITLE & PINS	BOX OUTPUT CONN & PIN NO.	ATA REF.
1	KG	P3-52	P3-52	1A2-A POS	FE/SO NO.4D	P18-2	31-41-00
2	% MAC	P3-52	P3-52	1A2-A POS	FE/SO NO.4D	P18-2	31-41-00
3	HARD LANDING RESET	P3-52	P3-52	1A2-A POS	FE/SO NO.4D	P18-2	31-41-00
4	CG FWD	P3-52	P3-52	1A2-A POS	FE/SO NO.4D	P18-2	31-41-00
5	CG AFT	P3-52	P3-52	1A2-A POS	FE/SO NO.4D	P18-2	31-41-00
6	L MAIN	P3-52	P3-52	1A2-A POS	FE/SO NO.4D	P18-2	31-41-00
7	L MAIN	P3-52	P3-52	1A2-A POS	FE/SO NO.4D	P18-2	31-41-00
8	NOSE	P3-52	P3-52	1A2-A POS	FE/SO NO.4D	P18-2	31-41-00
9	NOSE	P3-52	P3-52	1A2-A POS	FE/SO NO.4D	P18-2	31-41-00
10	R MAIN	P3-52	P3-52	1A2-A POS	FE/SO NO.4D	P18-2	31-41-00
11	R MAIN	P3-52	P3-52	1A2-A POS	FE/SO NO.4D	P18-2	31-41-00
12	TEST	P3-52	P3-52	1A2-A POS	FE/SO NO.4D	P18-2	31-41-00
13	ON	P3-52	P3-52	1A2-A POS	FE/SO NO.4D	P18-2	31-41-00

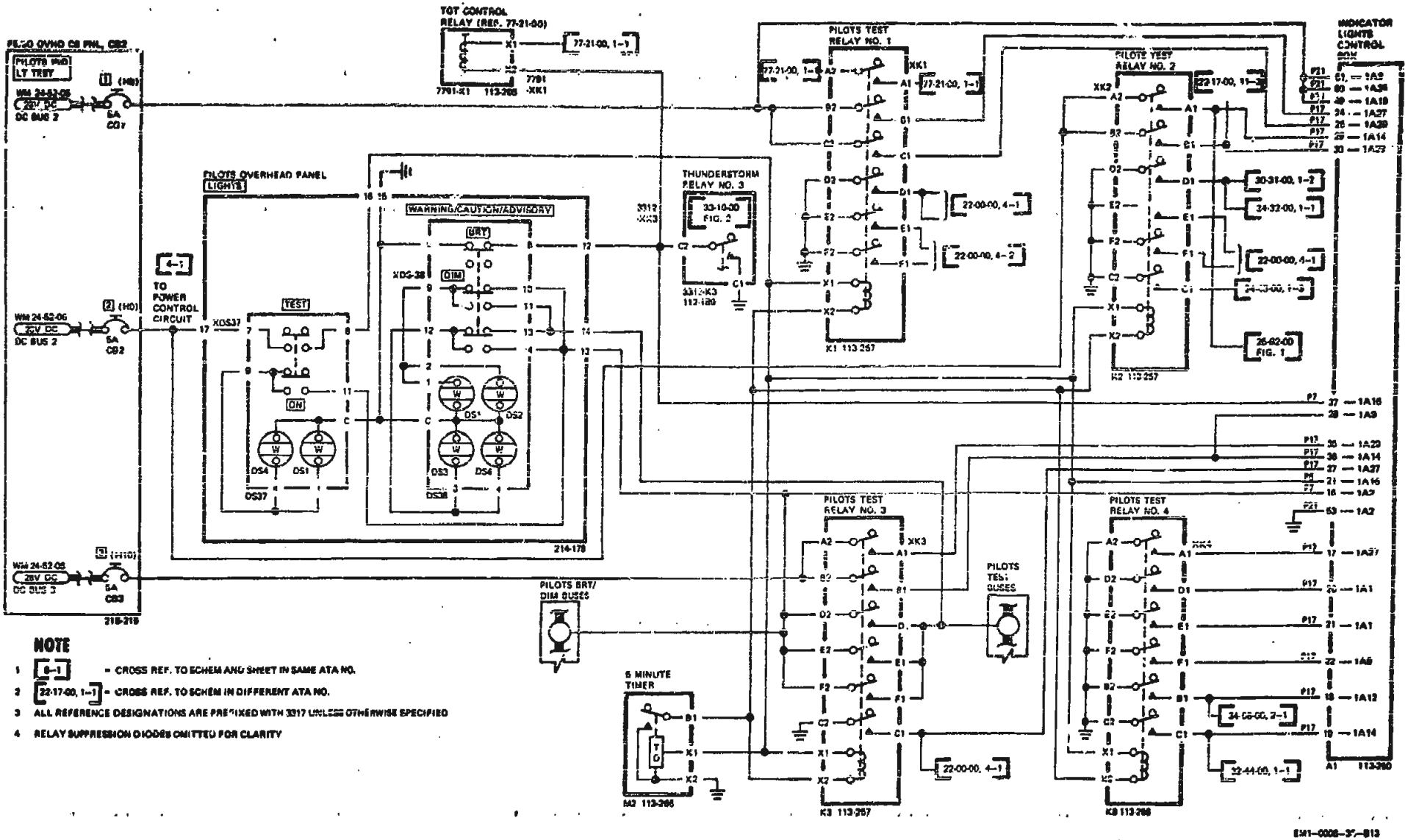
1 TEST LIGHTS ON PANEL, POWER SWITCHLIGHT AND SYSTEM TEST SWITCHLIGHT MUST BE IN ONE POSITION

2 WEIGHT AND BALANCE PANEL DELETED ON AIRCRAFT 032 AND UP

NOTE

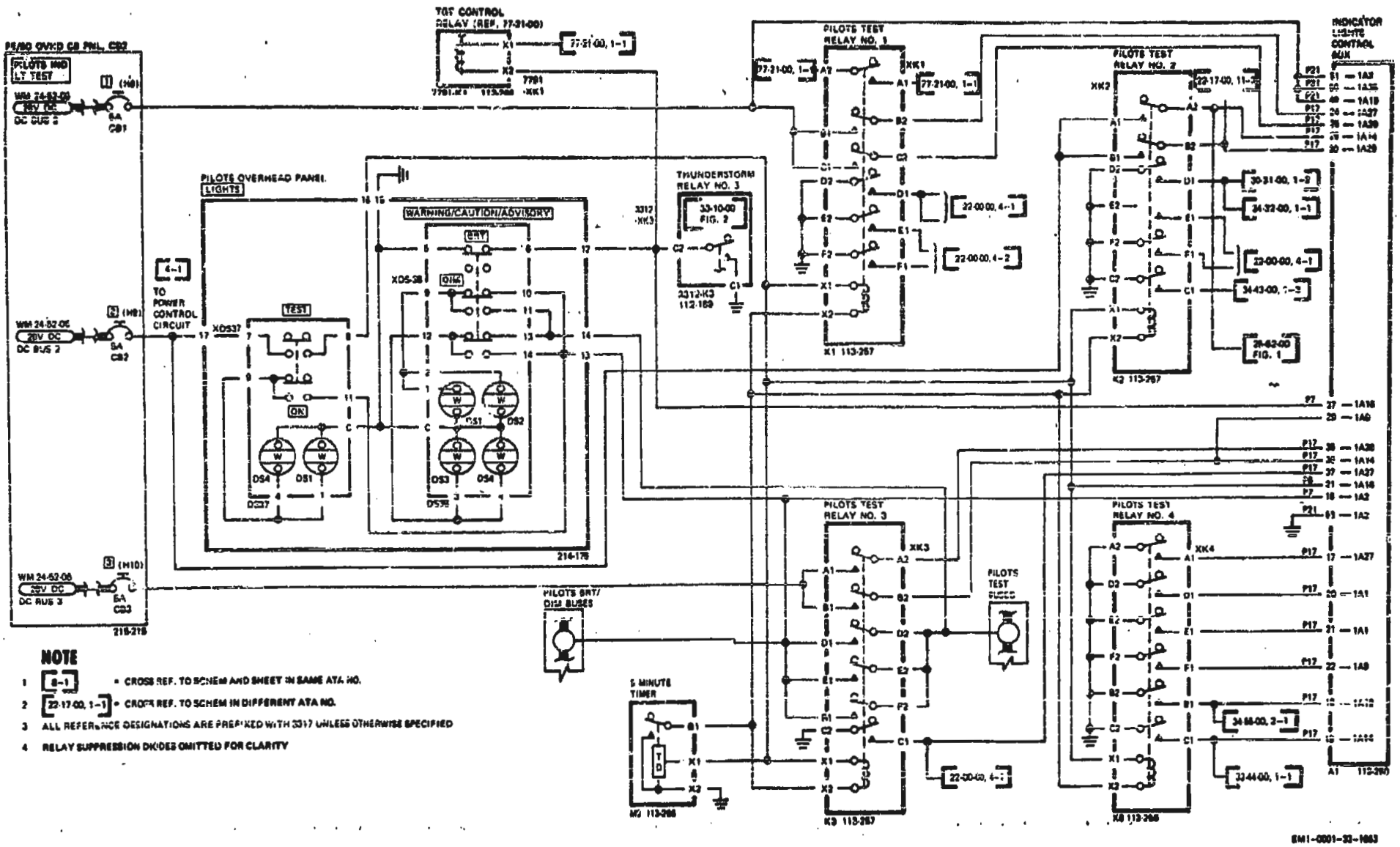
51-0501-33-1132

Indicator Signals - Rated EPR Mode and Weight and Balance Panels
Figure 127


TGT CONTROL RELAY (REF. 77-21-00)
PILOTS TEST RELAY NO. 1
PILOTS TEST RELAY NO. 2
INDICATOR LIGHTS CONTROL
PILOTS OVERHEAD PANEL LIGHTS
WARNING/CAUTION/ADVISORY
THUNDERSTORM RELAY NO. 3
TO POWER CONTROL CIRCUIT
TEST
DIM
BRT
ON
PILOTS TEST RELAY NO. 3
PILOTS TEST RELAY NO. 4
PILOTS BRT/DIM BUSES
PILOTS TEST BUSES
5 MINUTE TIMER
DC BUS 2
DC BUS 3
214-178
215-219
NOTE
1 [4-1] = CROSS REF. TO SCHEM AND SHEET IN SAME ATA NO.
2 [22-17-00, 1-1] = CROSS REF. TO SCHEM IN DIFFERENT ATA NO.
3 ALL REFERENCE DESIGNATIONS ARE PREFIXED WITH 3317 UNLESS OTHERWISE SPECIFIED
4 RELAY SUPPRESSION DIODES OMITTED FOR CLARITY

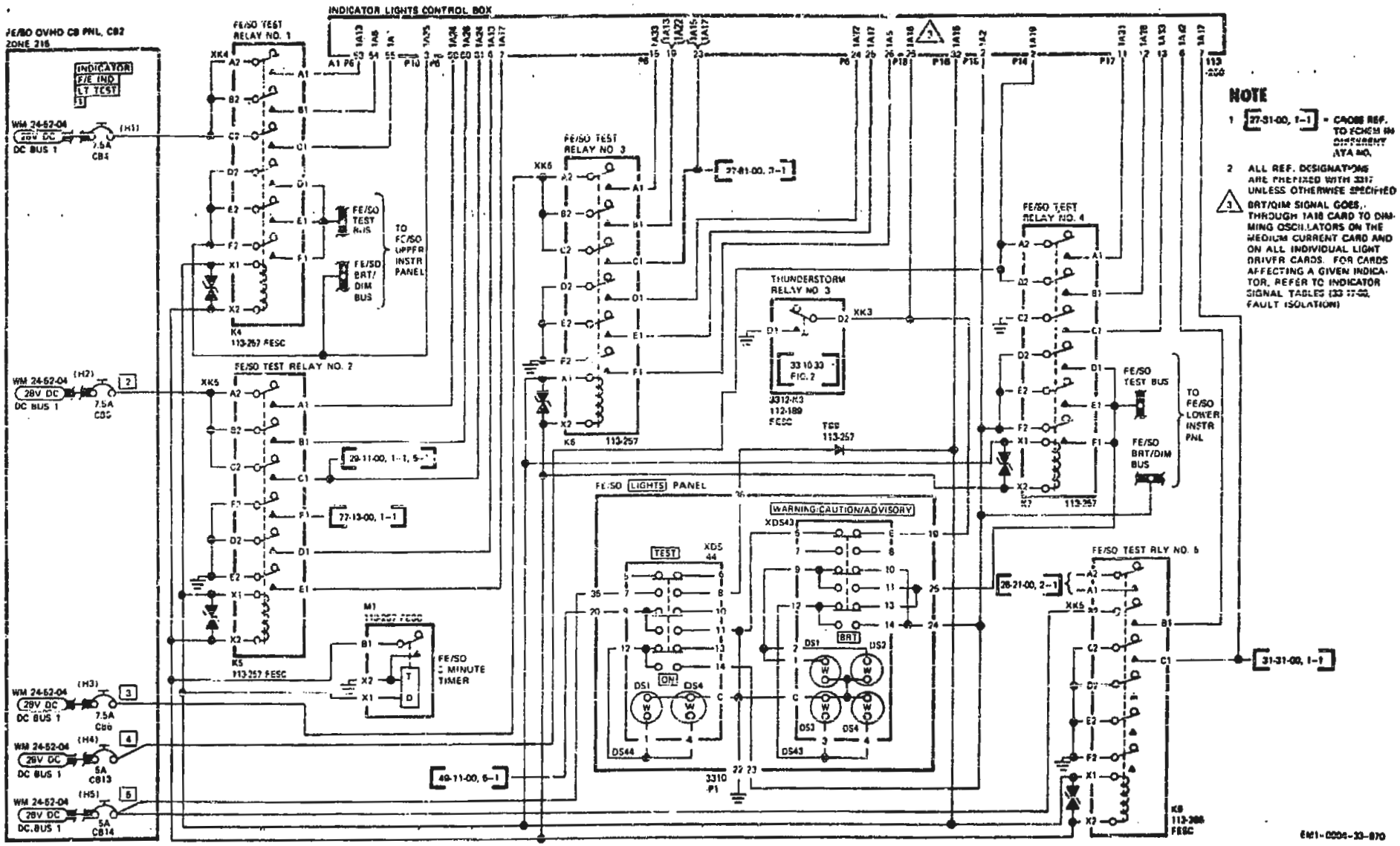
Pilots Bright/Dim and Test Schematic
SCHEM 1

R EFFECTIVITY: 001-032
R
0078

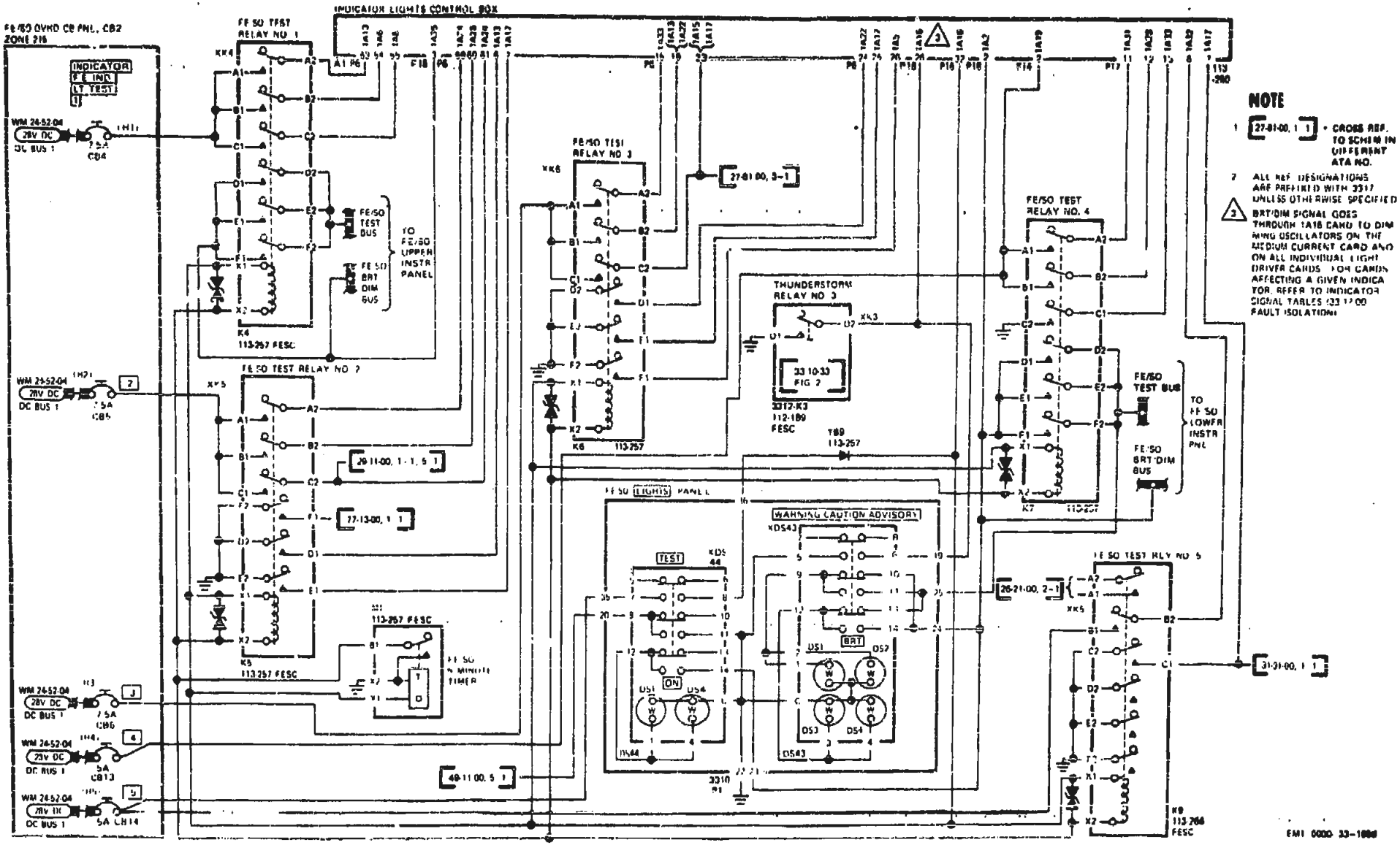

TGT CONTROL RELAY (REF. 77-21-00)
PILOTS TEST RELAY NO. 1
PILOTS TEST RELAY NO. 2
INDICATOR LIGHTS CONTROL BUS
PILOTS OVERHEAD PANEL LIGHTS
WARNING/CAUTION/ADVISORY
THUNDERSTORM RELAY NO. 3
TO POWER CONTROL CIRCUIT
PILOTS TEST RELAY NO. 3
PILOTS TEST RELAY NO. 4
PILOTS BRT/DIM BUSES
PILOTS TEST BUSES
5 MINUTE TIMER
NOTE
1 CROSS REF. TO SCHEM AND SHEET IN SAME ATA NO.
2 CROSS REF. TO SCHEM IN DIFFERENT ATA NO.
3 ALL REFERENCE DESIGNATIONS ARE PREFIXED WITH 3317 UNLESS OTHERWISE SPECIFIED
4 RELAY SUPPRESSION DIODES OMITTED FOR CLARITY

Pilots Bright/Dim Test Schematic
SCHEM 1

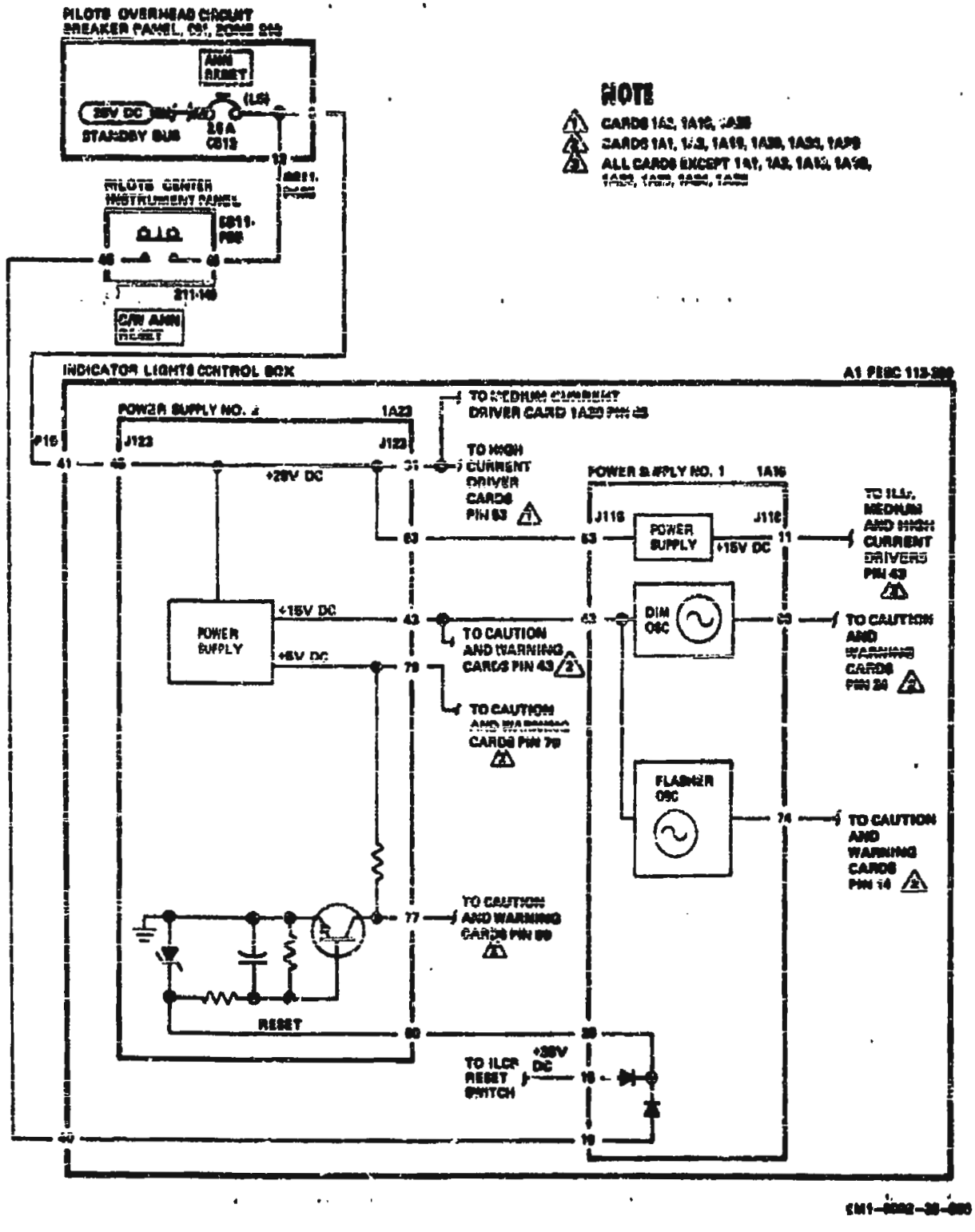
EFFECTIVITY: 033-999


INDICATOR LIGHTS CONTROL BOX
FE/SO OVHD CB PNL, CB2
ZONE 215
INDICATOR F/E IND LT TEST
WM 24-52-04
28V DC
DC BUS 1
7.5A CB4
FE/SO TEST RELAY NO. 1
FE/SO TEST RELAY NO. 2
FE/SO TEST RELAY NO. 3
FE/SO TEST RELAY NO. 4
FE/SO TEST RLY NO. 5
FE/SO TEST BUS
FE/SO BRT/DIM BUS
TO FE/SO UPPER INSTR PANEL
TO FE/SO LOWER INSTR PNL
THUNDERSTORM RELAY NO 3
FE/SO LIGHTS PANEL
WARNING/CAUTION/ADVISORY
TEST
BRT
ON
FE/SO 5 MINUTE TIMER
7.5A CB6
5A CB13
5A CB14
NOTE
1 [27-31-00, 1-1] = CROSS REF. TO ECHOM IN DIFFERENT ATA NO.
2 ALL REF. DESIGNATIONS ARE PREFIXED WITH 3317 UNLESS OTHERWISE SPECIFIED
3 BRT/DIM SIGNAL GOES THROUGH 1A18 CARD TO DIMMING OSCILLATORS ON THE MEDIUM CURRENT CARD AND ON ALL INDIVIDUAL LIGHT DRIVER CARDS. FOR CARDS AFFECTING A GIVEN INDICATOR, REFER TO INDICATOR SIGNAL TABLES (33-17-00, FAULT ISOLATION)

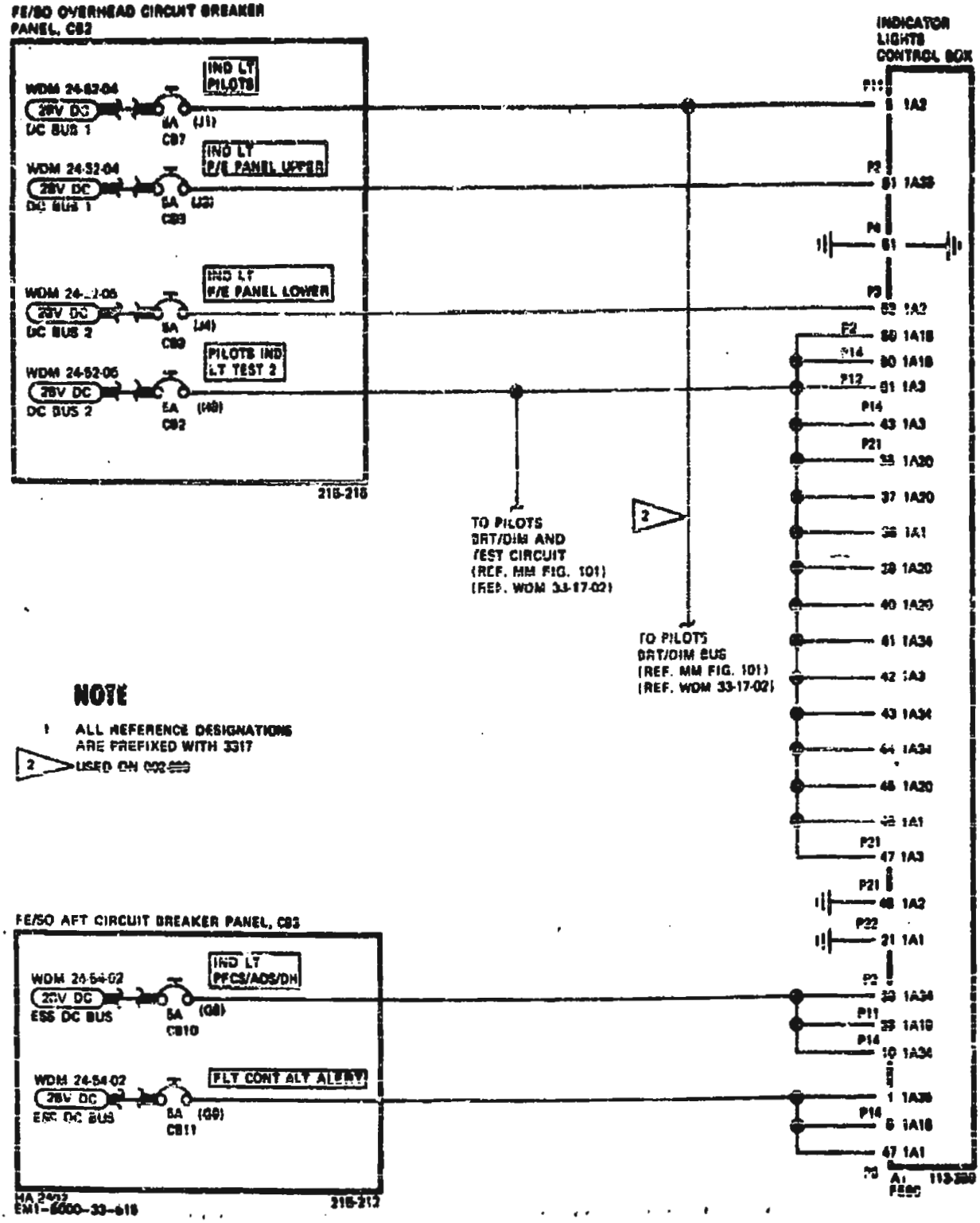
FE/SO Bright/Dim and Test Schematic
SCHEM 2


INDICATOR LIGHTS CONTROL BOX
FE/SO OVHD CB PNL, CB2
ZONE 216
INDICATOR
F E IND
LT TEST
FE SO TEST RELAY NO 1
FE/SO TEST RELAY NO 3
FE SO TEST RELAY NO 2
FE/SO TEST RELAY NO. 4
THUNDERSTORM RELAY NO 3
FE/SO TEST BUS
FE/SO BRT DIM BUS
TO FE/SO UPPER INSTR PANEL
TO FE SO LOWER INSTR PNL
FE SO LIGHTS PANEL
WARNING CAUTION ADVISORY
TEST
ON
BRT
FE SO TEST RLY NO 5
FE SO 5 MINUTE TIMER
NOTE
1 CROSS REF. TO SCHEM IN DIFFERENT ATA NO.
2 ALL REF DESIGNATIONS ARE PREFIXED WITH 3317 UNLESS OTHERWISE SPECIFIED
3 BRT/DIM SIGNAL GOES THROUGH 1A18 CARD TO DIMMING OSCILLATORS ON THE MEDIUM CURRENT CARD AND ON ALL INDIVIDUAL LIGHT DRIVER CARDS FOR CARDS AFFECTING A GIVEN INDICATOR, REFER TO INDICATOR SIGNAL TABLES 33-17-00 FAULT ISOLATION

FE/SO Bright/Dim and Test Schematic
SCHEM 2

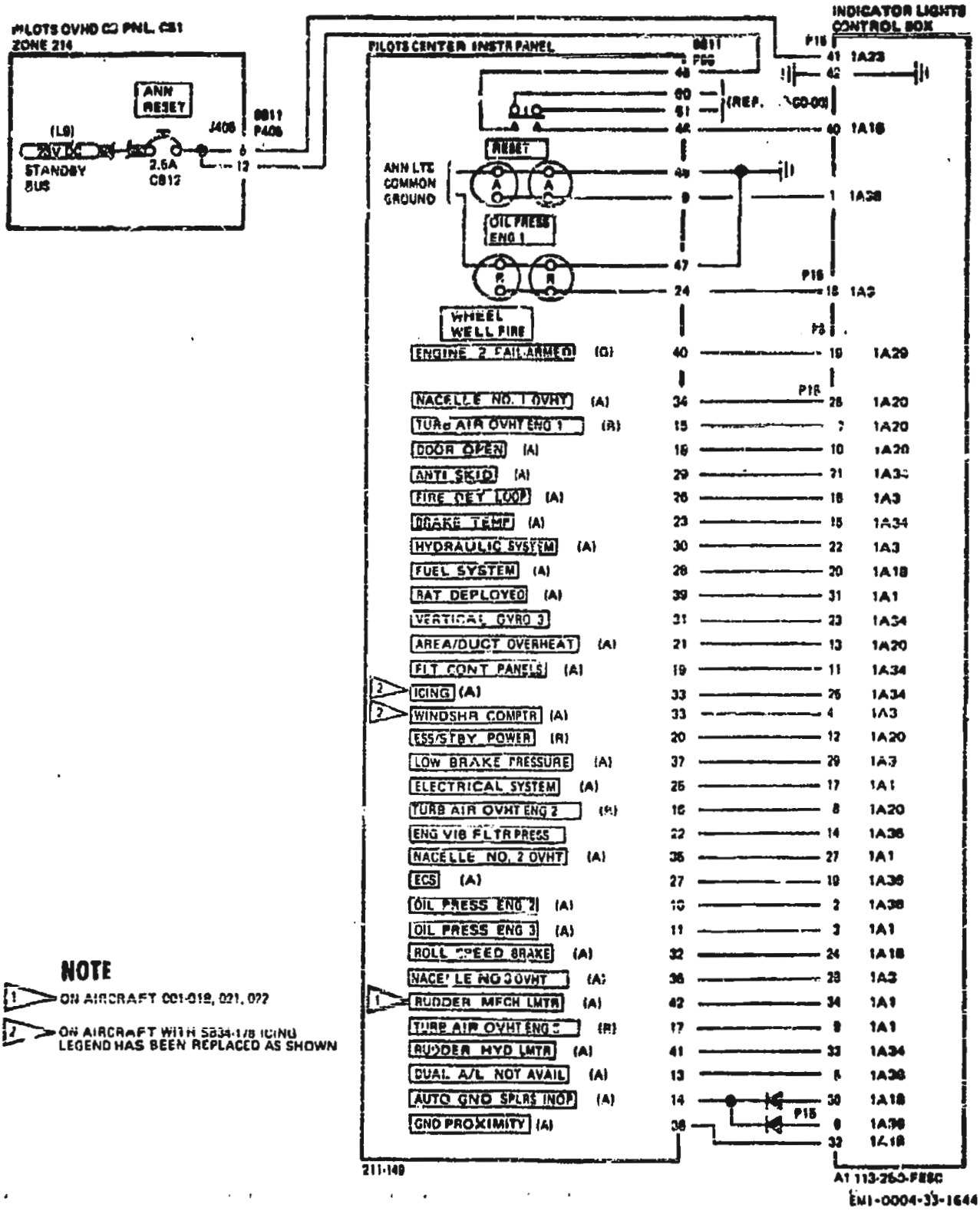


Annunciator System Power Supply Schematic
SCHEM 3



Annunciator System Power Control Schematic
SCHEM 4

R EFFECTIVITY: ALL
R
007B

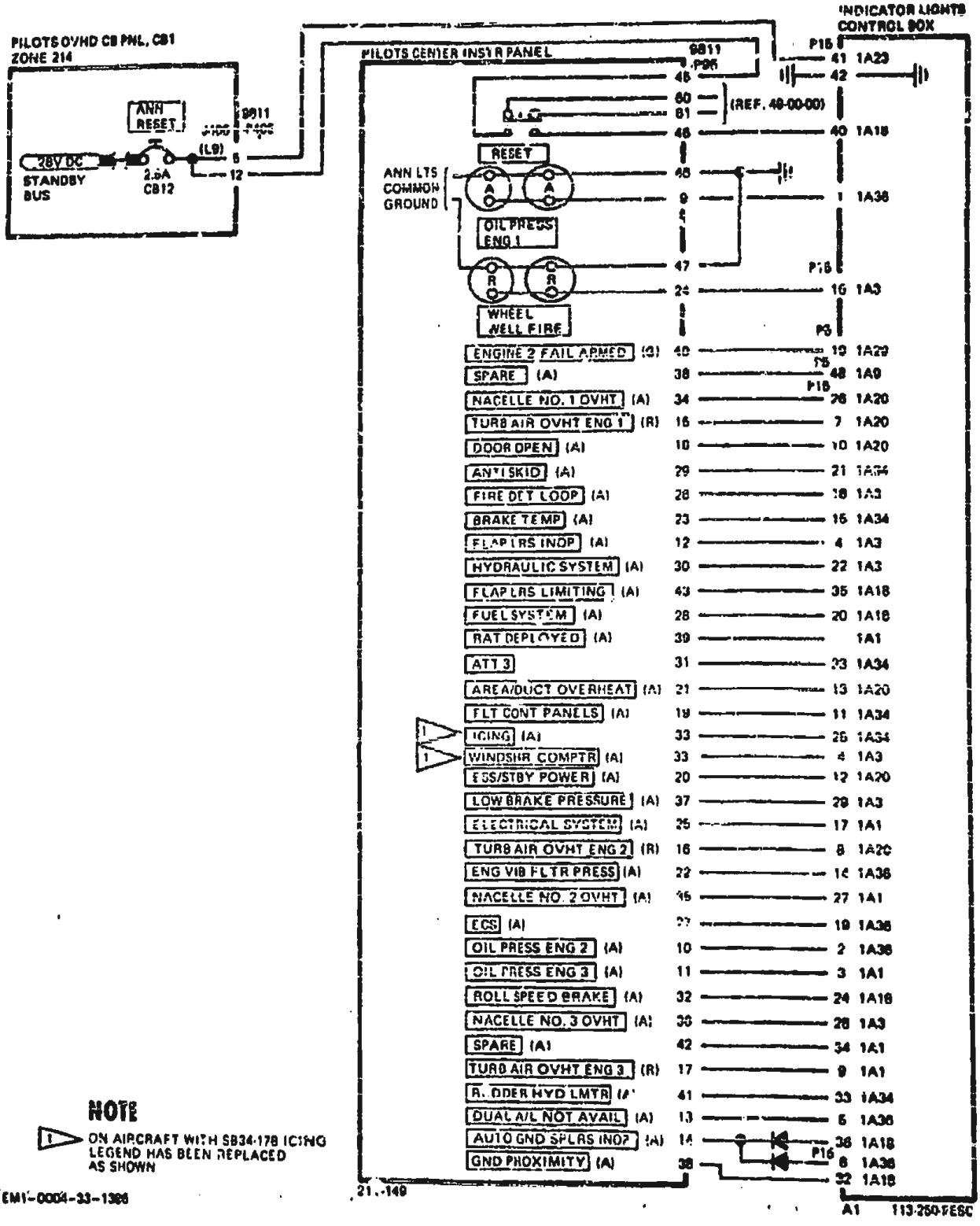


NOTE

1. ON AIRCRAFT 001-019, 021, 022
2. ON AIRCRAFT WITH SB34-178 ICING LEGEND HAS BEEN REPLACED AS SHOWN

CR Annunciator System Caution and Warning Lights Schematic
CR SCHEM 5

EFFECTIVITY: 001-031

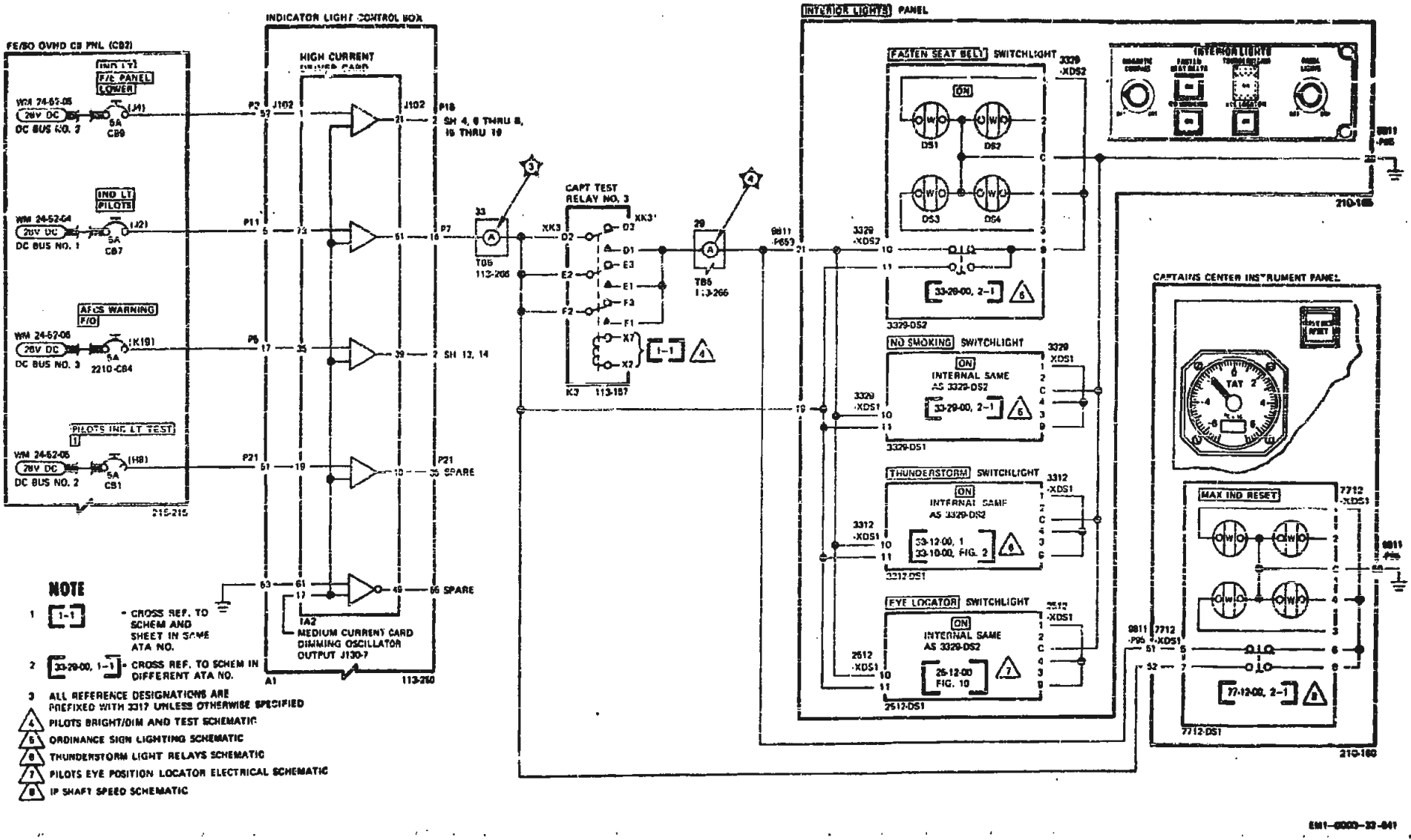

PILOTS OVHD CB PNL, CB1
ZONE 214
ANN RESET
(L9)
28V DC
STANDBY BUS
2.5A CB12
9911
5
12
PILOTS CENTER INSTR PANEL
9911 P96
INDICATOR LIGHTS CONTROL BOX
P16
41 1A23
42
48
60
61
(REF. 49-00-00)
46
40 1A18
RESET
ANN LTS COMMON GROUND
45
9
1 1A38
OIL PRESS ENG 1
47
24
16 1A3
WHEEL WELL FIRE
P3
ENGINE 2 FAIL ARMED (S) 40 19 1A23
SPARE (A) 38 48 1A9
NACELLE NO. 1 OVHT (A) 34 26 1A20
TURB AIR OVHT ENG 1 (R) 16 7 1A20
DOOR OPEN (A) 10 10 1A20
ANTI SKID (A) 29 21 1A34
FIRE DET LOOP (A) 28 18 1A3
BRAKE TEMP (A) 23 15 1A34
FLAP LRS INOP (A) 12 4 1A3
HYDRAULIC SYSTEM (A) 30 22 1A3
FLAP LRS LIMITING (A) 43 35 1A18
FUEL SYSTEM (A) 28 20 1A18
RAT DEPLOYED (A) 39 1A1
ATT 3 31 23 1A34
AREA/DUCT OVERHEAT (A) 21 13 1A20
FLT CONT PANELS (A) 19 11 1A34
1 ICING (A) 33 25 1A34
1 WINDSHR COMPTR (A) 33 4 1A3
ESS/STBY POWER (A) 20 12 1A20
LOW BRAKE PRESSURE (A) 37 29 1A3
ELECTRICAL SYSTEM (A) 25 17 1A1
TURB AIR OVHT ENG 2 (R) 16 8 1A20
ENG VIB FLTR PRESS (A) 22 14 1A38
NACELLE NO. 2 OVHT (A) 45 27 1A1
ECS (A) 27 19 1A38
OIL PRESS ENG 2 (A) 10 2 1A38
OIL PRESS ENG 3 (A) 11 3 1A1
ROLL SPEED BRAKE (A) 32 24 1A18
NACELLE NO. 3 OVHT (A) 30 26 1A3
SPARE (A) 42 34 1A1
TURB AIR OVHT ENG 3 (R) 17 9 1A1
R. RDER HYD LMTR (A) 41 33 1A34
DUAL A/L NOT AVAIL (A) 13 5 1A38
AUTO GND SPLRS INOP (A) 14 36 1A18
P16
GND PROXIMITY (A) 38 6 1A38
32 1A18
21.-149
A1 113-250-7ESC

NOTE

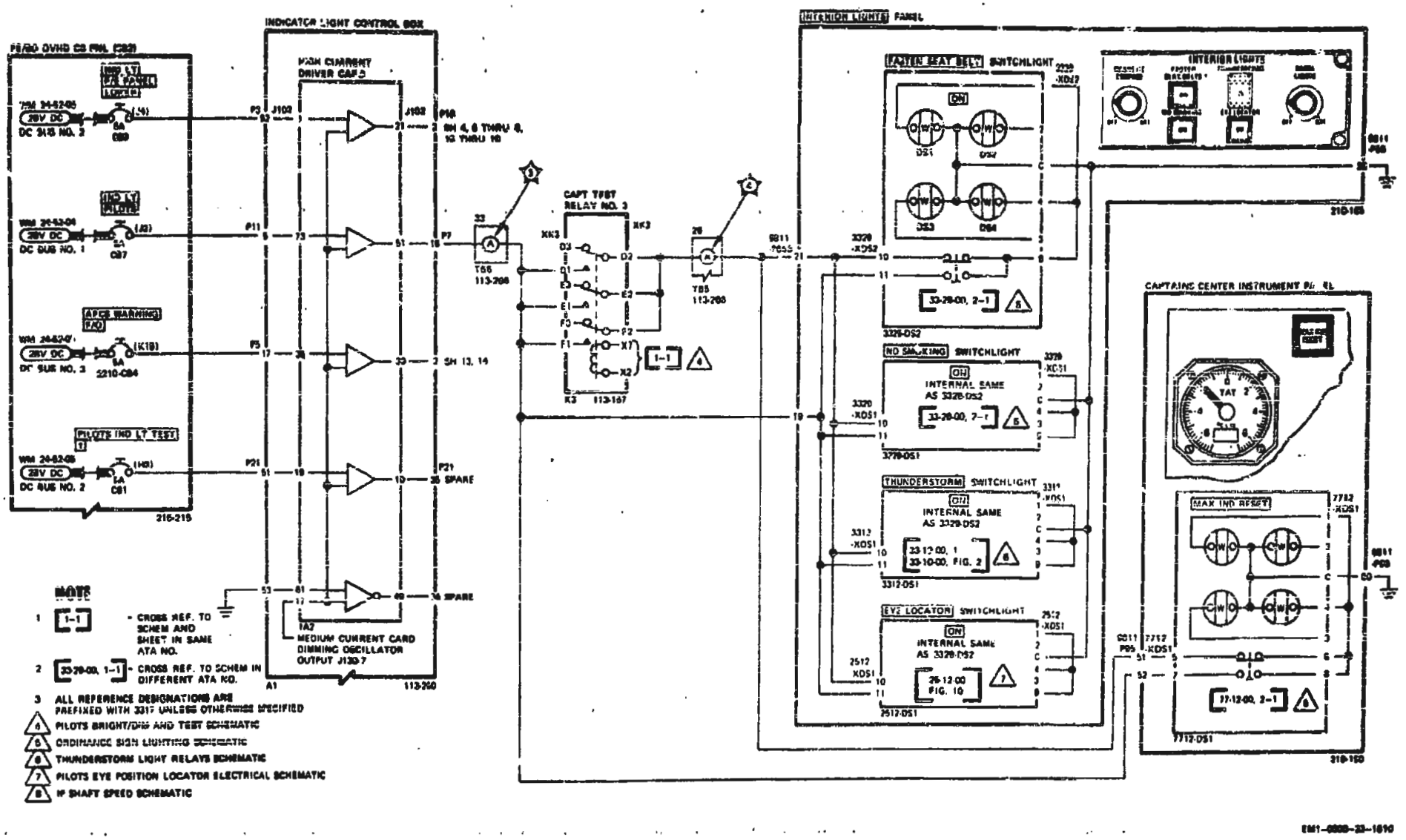
1 ON AIRCRAFT WITH SB34-178 ICING LEGEND HAS BEEN REPLACED AS SHOWN

EM1-0004-33-1366

CR Annunciator System Caution and Warning Lights Schematic
CR SCHEM 5

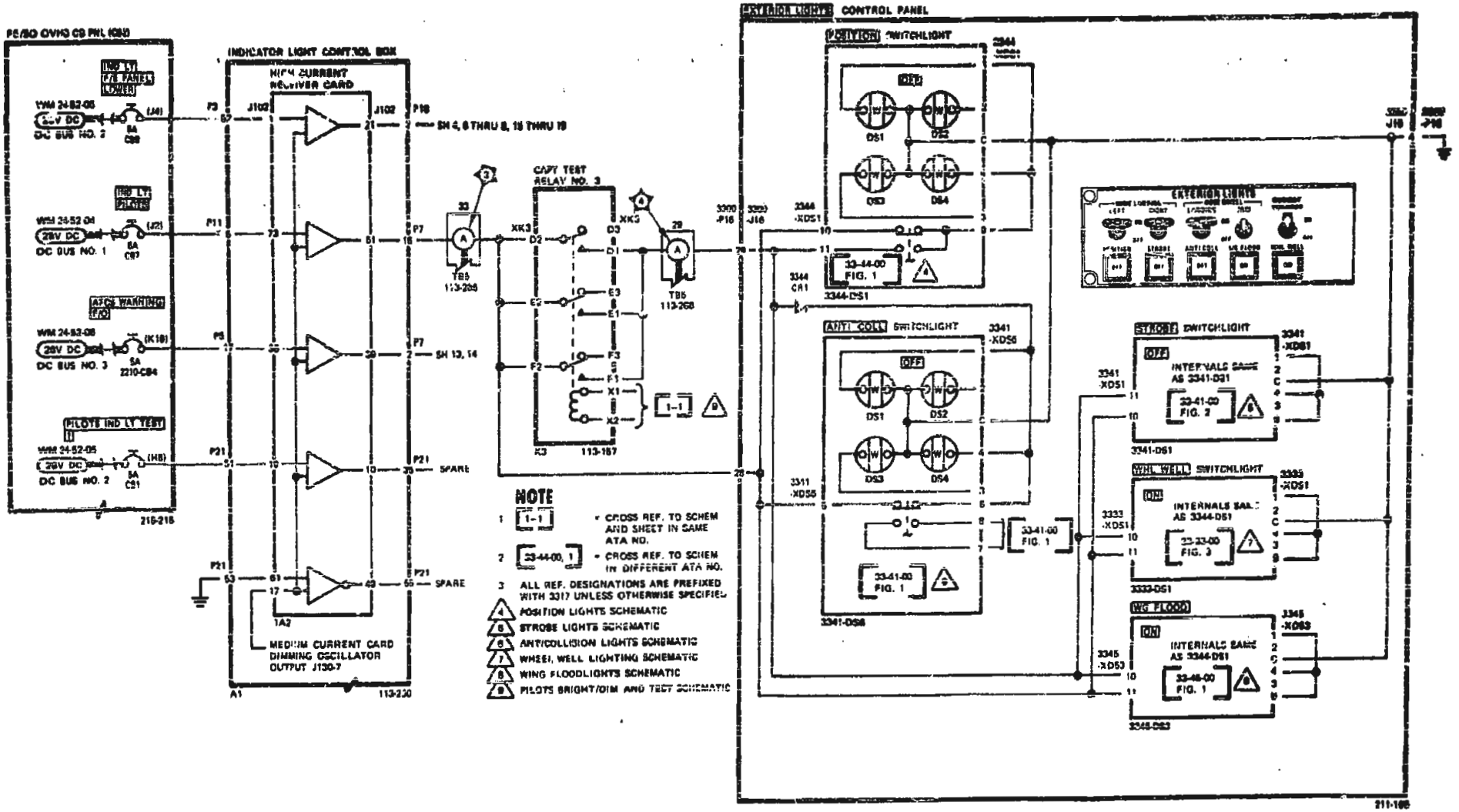


Indicator Bright/Dim and Test - Card 1A2 chematic
SCHEM 6 (Sheet 1)


INDICATOR LIGHT CONTROL BOX
HIGH CURRENT DRIVER CARD
MEDIUM CURRENT CARD DIMMING OSCILLATOR OUTPUT J103-7
INTERIOR LIGHTS PANEL
FASTEN SEAT BELT SWITCHLIGHT
NO SMOKING SWITCHLIGHT
THUNDERSTORM SWITCHLIGHT
EYE LOCATOR SWITCHLIGHT
INTERIOR LIGHTS
CAPTAINS CENTER INSTRUMENT PNL
MAX IND RESET
CAPT TEST RELAY NO. 3
APCS WARNING
PILOTS IND LT TEST
NOTES
1 [1-1] - CROSS REF. TO SCHEM AND SHEET IN SAME ATA NO.
2 [33-20-00, 1-1] - CROSS REF. TO SCHEM IN DIFFERENT ATA NO.
3 ALL REFERENCE DESIGNATIONS ARE PREFIXED WITH 3317 UNLESS OTHERWISE SPECIFIED
4 PILOTS BRIGHT/DIM AND TEST SCHEMATIC
5 ORDINANCE SIGN LIGHTING SCHEMATIC
6 THUNDERSTORM LIGHT RELAYS SCHEMATIC
7 PILOTS EYE POSITION LOCATOR ELECTRICAL SCHEMATIC
8 N1 SHAFT SPEED SCHEMATIC

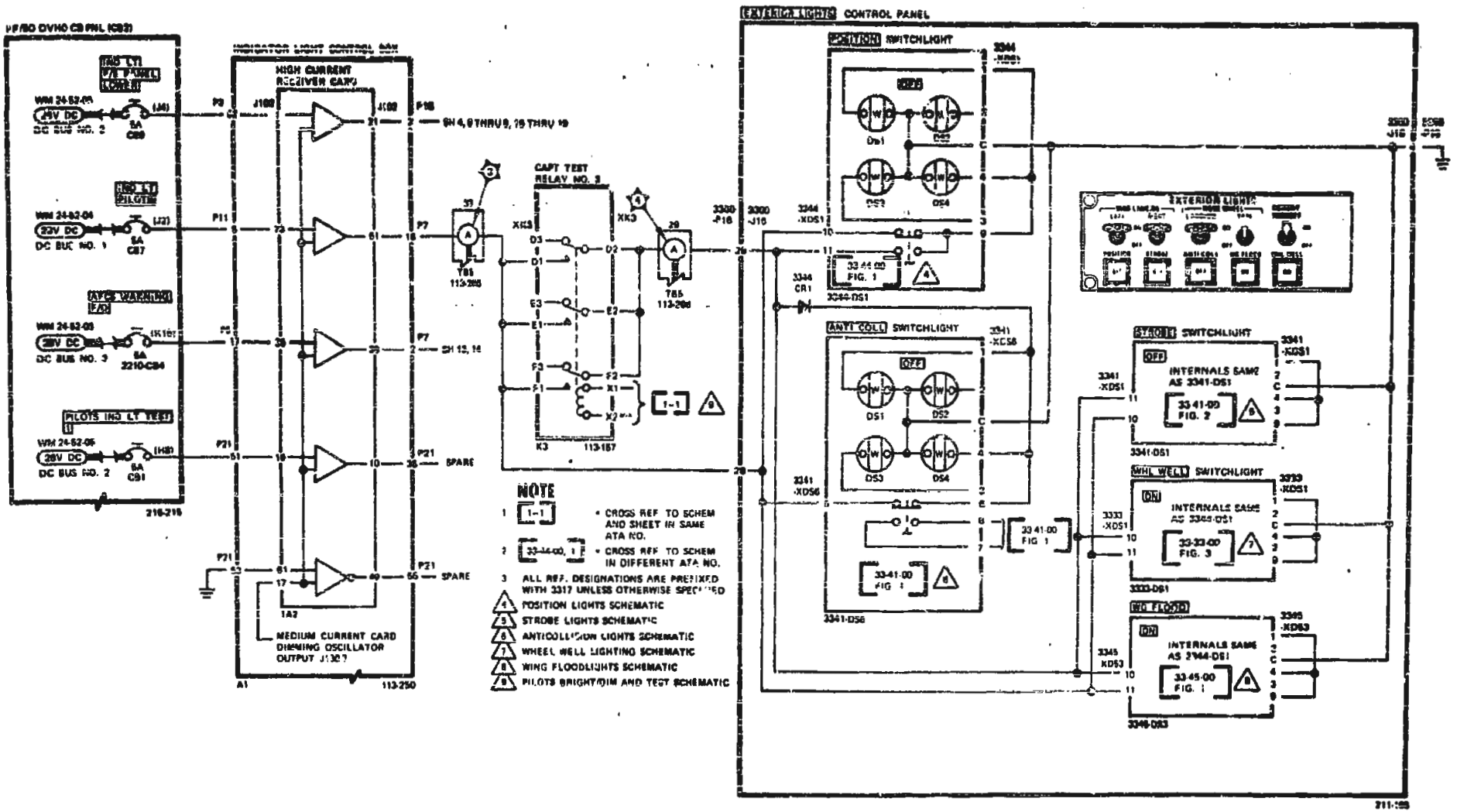
Indicator Bright/Dim and Test - Card 1A2 Schematic
SCHEM 6 (Sheet 1)

R EFFECTIVITY: 033-999
R
007B


INDICATOR LIGHT CONTROL BOX
MEDIUM CURRENT CARD
DIMMING OSCILLATOR
OUTPUT J130-7
CAPT TEST
RELAY NO. 3
EXTERIOR LIGHTS CONTROL PANEL
POSITION SWITCHLIGHT
ANTI COLL SWITCHLIGHT
STROBE SWITCHLIGHT
WHL WELL SWITCHLIGHT
WG FLOOD
NOTE
1 CROSS REF. TO SCHEM AND SHEET IN SAME ATA NO.
2 CROSS REF. TO SCHEM IN DIFFERENT ATA NO.
3 ALL REF. DESIGNATIONS ARE PREFIXED WITH 3317 UNLESS OTHERWISE SPECIFIED
4 POSITION LIGHTS SCHEMATIC
5 STROBE LIGHTS SCHEMATIC
6 ANTICOLLISION LIGHTS SCHEMATIC
7 WHEEL WELL LIGHTING SCHEMATIC
8 WING FLOODLIGHTS SCHEMATIC
9 PILOTS BRIGHT/DIM AND TEST SCHEMATIC

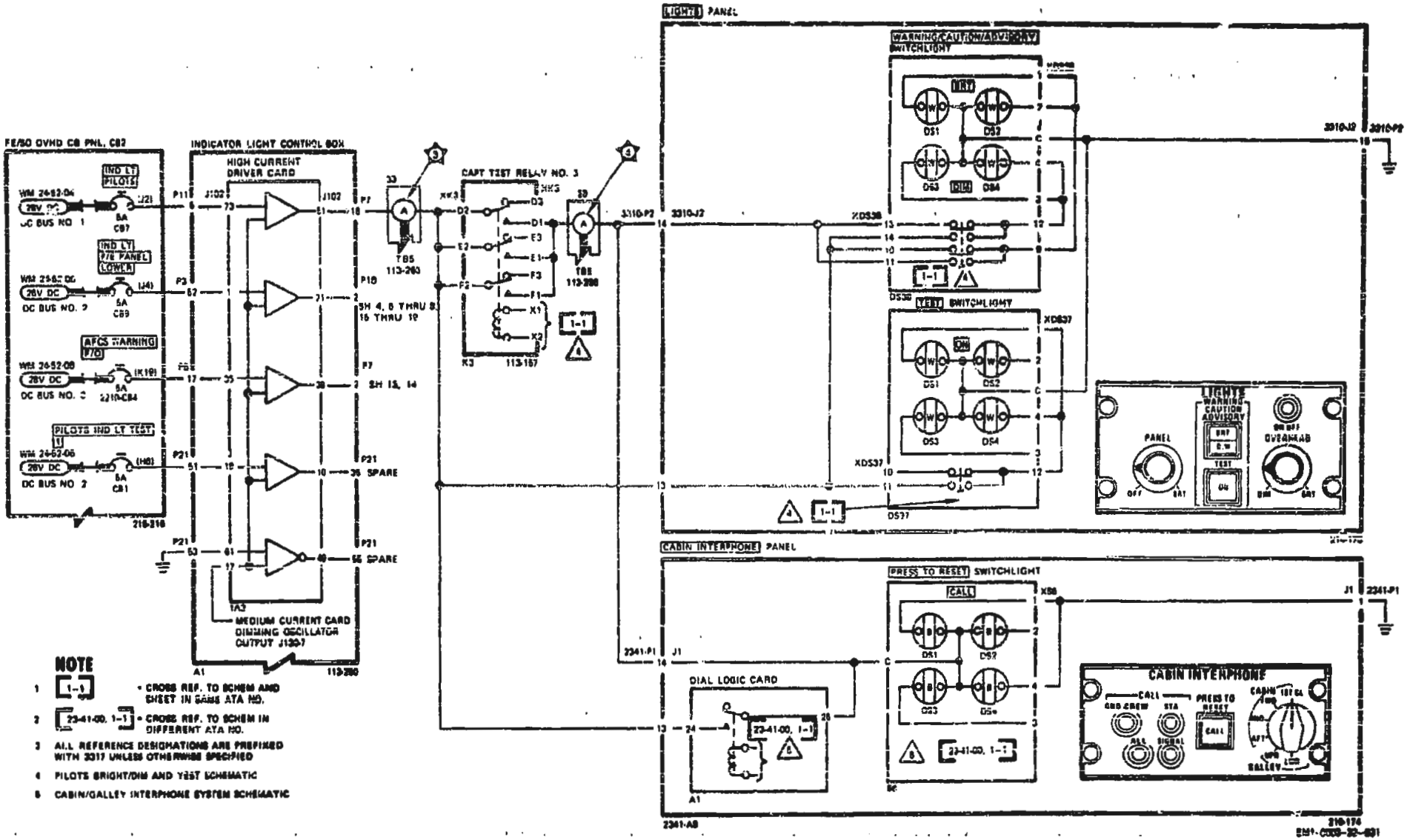
Indicator Bright/Dim and Test - Card 1A2 Schematic
SCHEM 6 (Sheet 2)

R EFFECTIVITY: 001-032
R
0078


EXTERIOR LIGHTS CONTROL PANEL
POSITION SWITCHLIGHT
ANTI COLL SWITCHLIGHT
STROBE SWITCHLIGHT
WHL WELL SWITCHLIGHT
WG FLOOD
EXTERIOR LIGHTS
HIGH CURRENT RECEIVER CARD
CAPT TEST RELAY NO. 3
MEDIUM CURRENT CARD DIMMING OSCILLATOR OUTPUT
NOTE
1 CROSS REF TO SCHEM AND SHEET IN SAME ATA NO.
2 CROSS REF TO SCHEM IN DIFFERENT ATA NO.
3 ALL REF. DESIGNATIONS ARE PREFIXED WITH 3317 UNLESS OTHERWISE SPECIFIED
4 POSITION LIGHTS SCHEMATIC
5 STROBE LIGHTS SCHEMATIC
6 ANTICOLLISION LIGHTS SCHEMATIC
7 WHEEL WELL LIGHTING SCHEMATIC
8 WING FLOODLIGHTS SCHEMATIC
9 PILOTS BRIGHT/DIM AND TEST SCHEMATIC

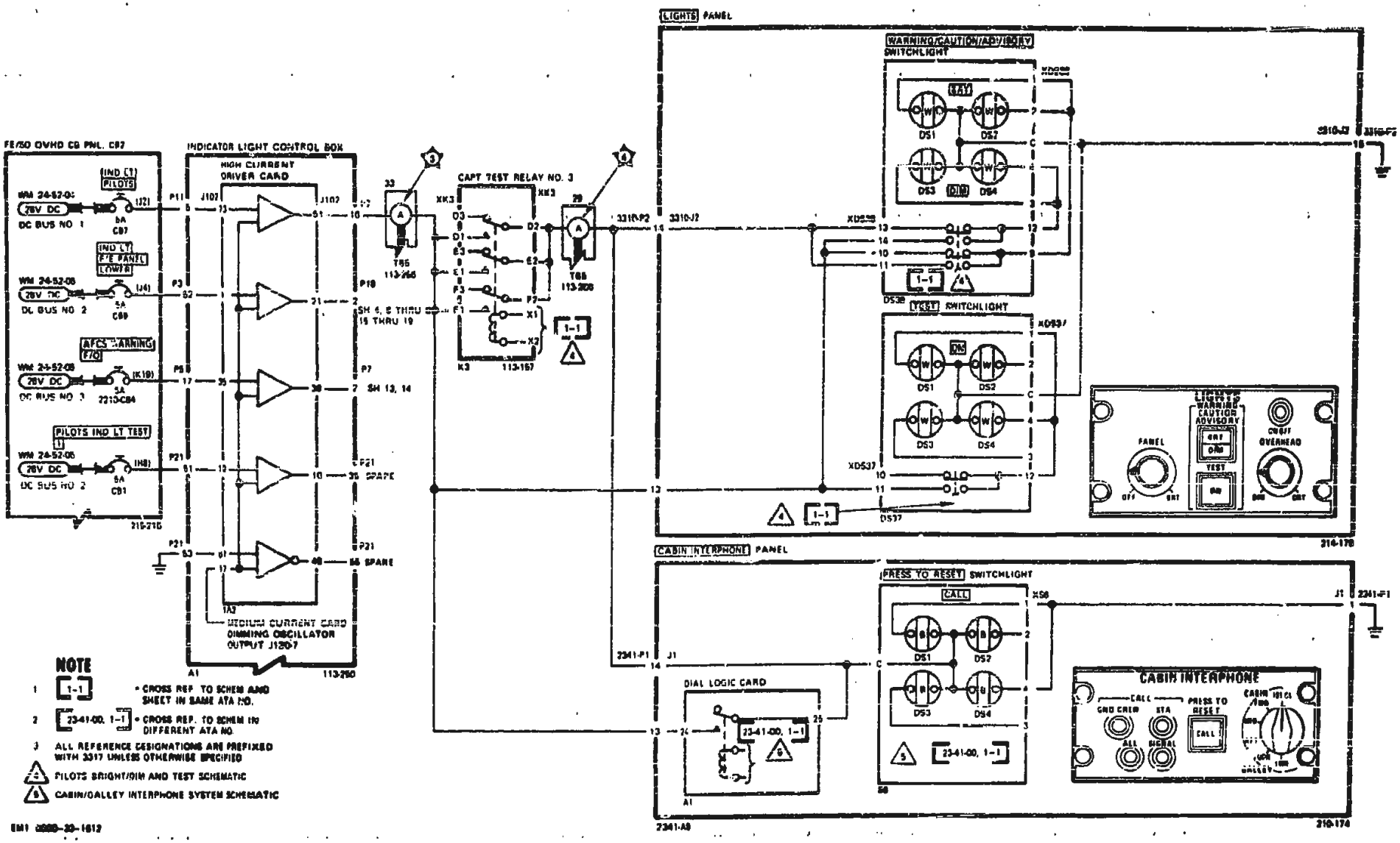
Indicator Bright/Dim and Test - Card 1A2 Schematic
SCHEM 6 (Sheet 2)

R
R
0078 EFFECTIVITY: 033-999



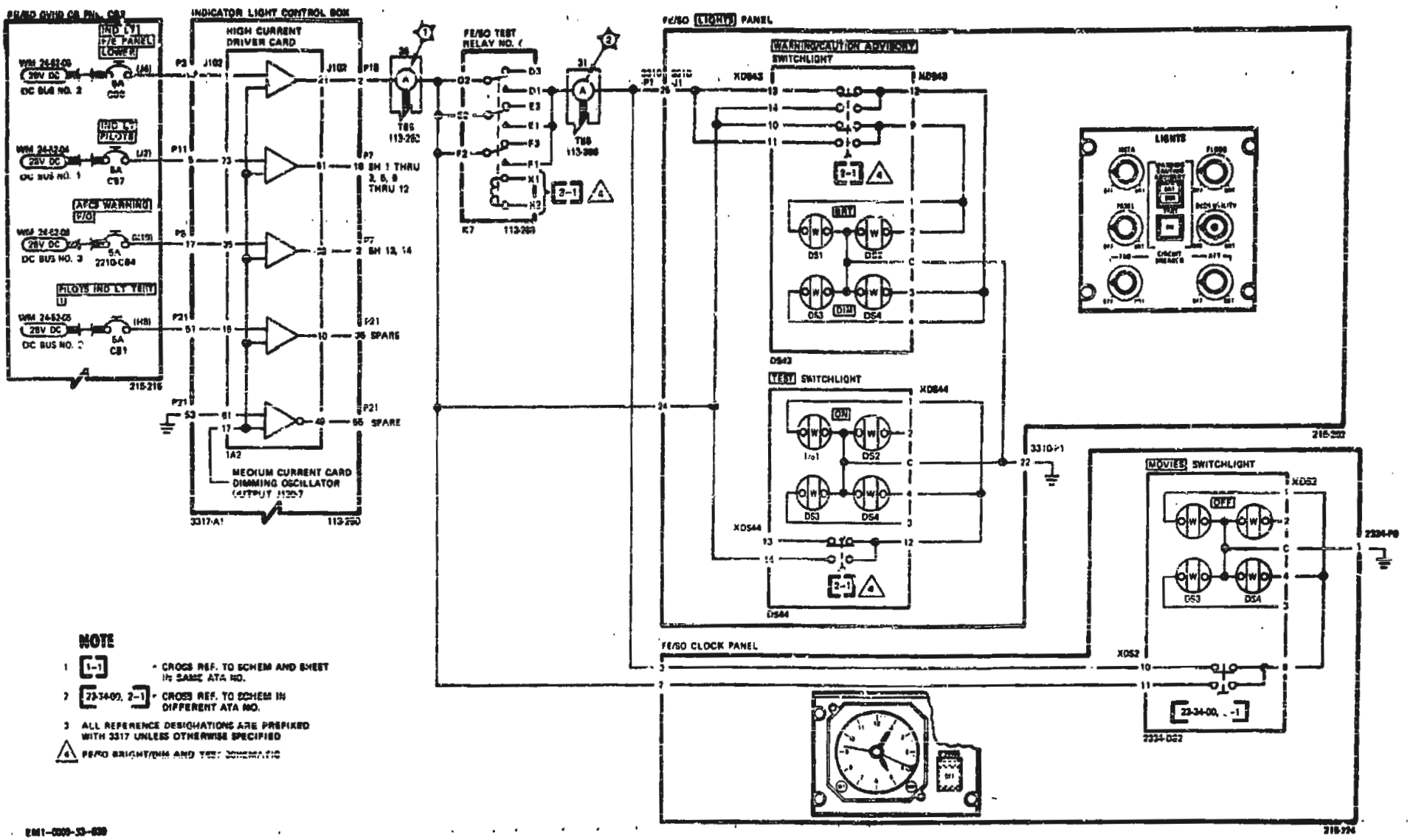
Indicator Bright/Dim and Test - Card 1A2 Schematic
SCHEM 6 (Sheet 3)

R EFFECTIVITY: 001-032
R
0078

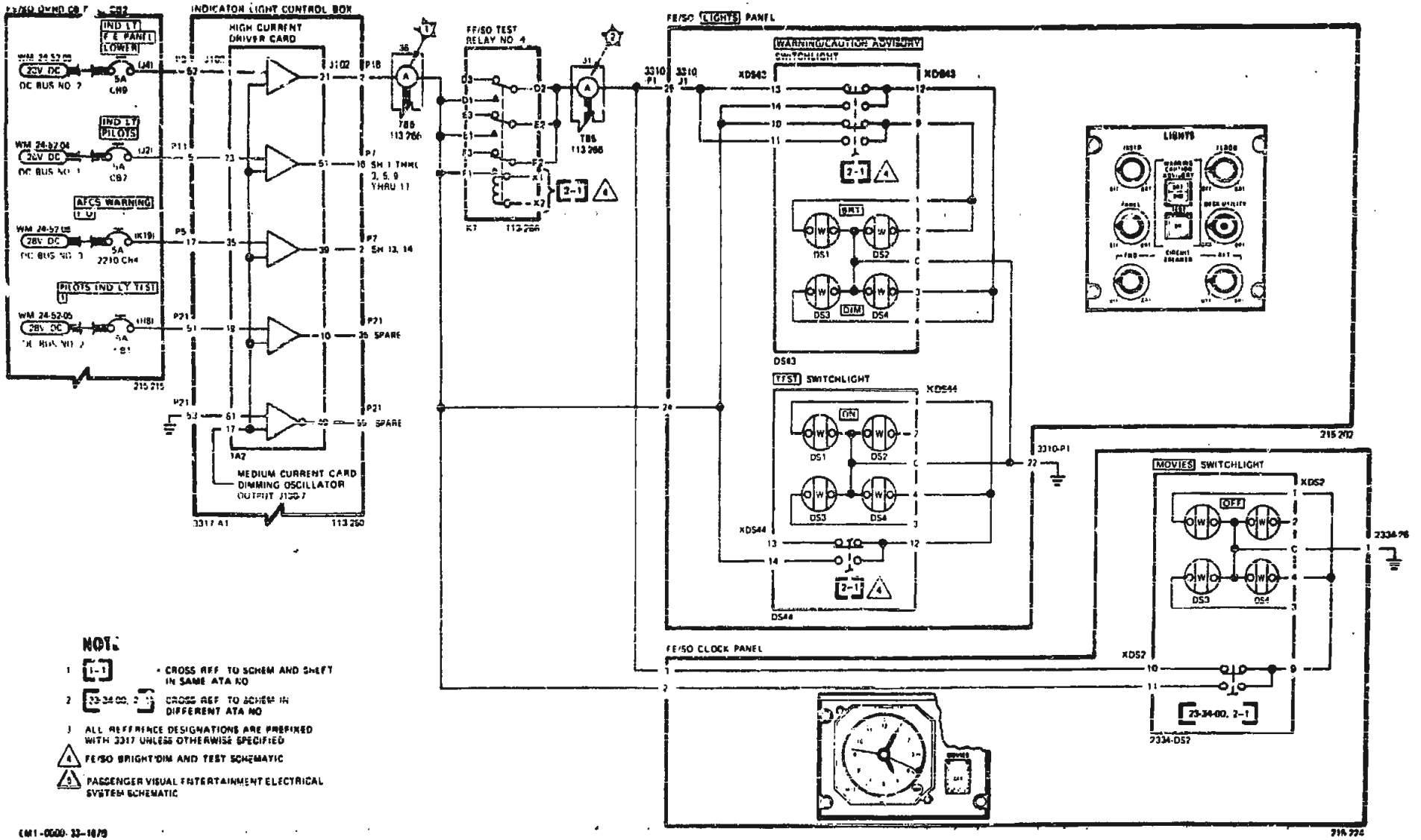

LIGHTS PANEL
WARNING/CAUTION/ADVISORY SWITCHLIGHT
TEST SWITCHLIGHT
FE/SO OVHD CB PNL. CB2
INDICATOR LIGHT CONTROL BOX
HIGH CURRENT DRIVER CARD
CAPT TEST RELAY NO. 3
CABIN INTERPHONE PANEL
PRESS TO RESET SWITCHLIGHT
DIAL LOGIC CARD
CABIN INTERPHONE
MEDIUM CURRENT CARD DIMMING OSCILLATOR OUTPUT J1207
NOTE
1 1-1 • CROSS REF. TO SCHEM AND SHEET IN SAME ATA NO.
2 23-41-00, 1-1 • CROSS REF. TO SCHEM IN DIFFERENT ATA NO.
3 ALL REFERENCE DESIGNATIONS ARE PREFIXED WITH 3317 UNLESS OTHERWISE SPECIFIED
4 PILOTS BRIGHT/DIM AND TEST SCHEMATIC
5 CABIN/GALLEY INTERPHONE SYSTEM SCHEMATIC

Indicator Bright/Dim and Test - Card 1A2 Schematic
SCHEM 6 (Sheet 3)

R EFFECTIVITY: 033-999
R
007B

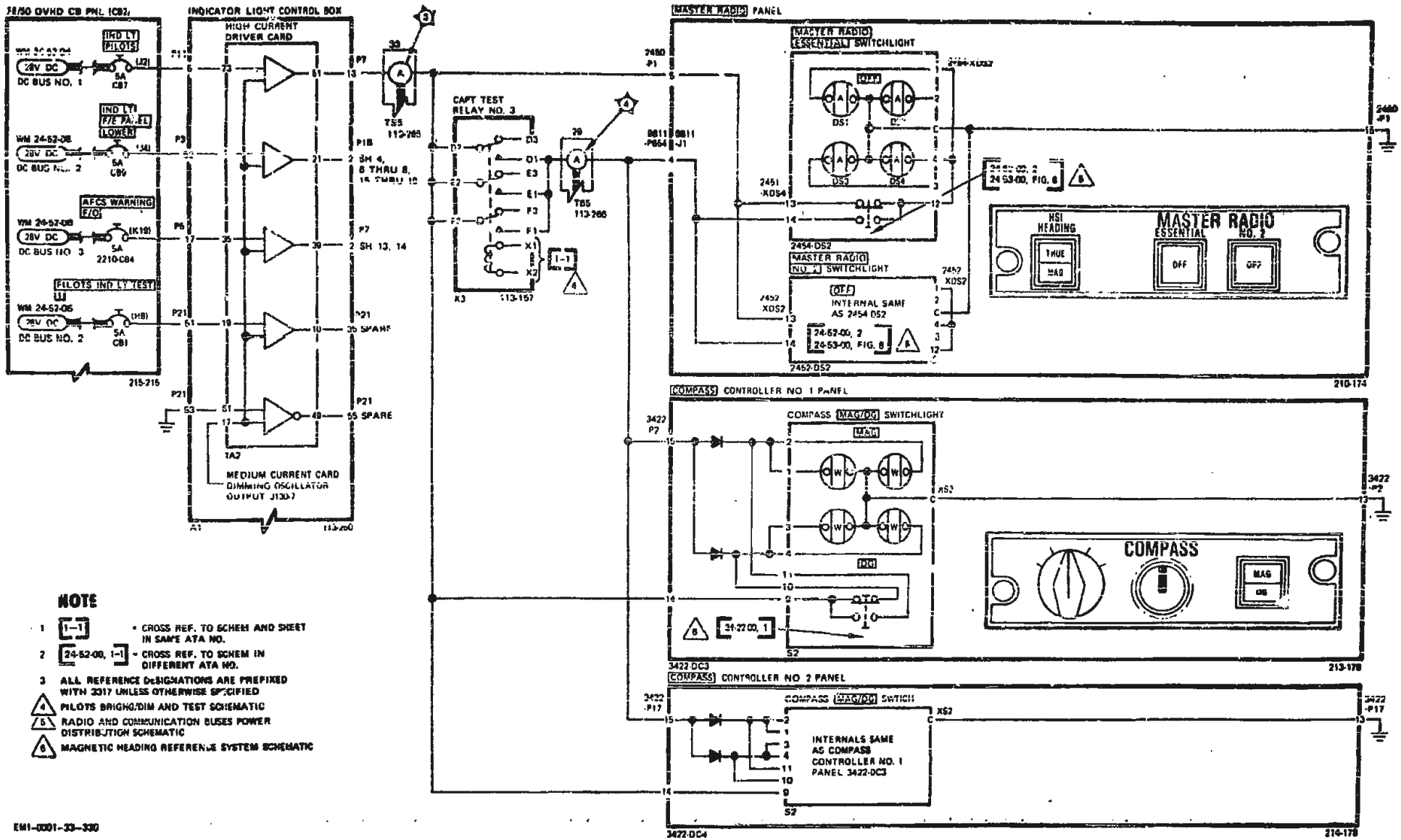

INDICATOR LIGHT CONTROL BOX
HIGH CURRENT DRIVER CARD
MEDIUM CURRENT CARD
DIMMING OSCILLATOR
FE/SO TEST RELAY NO. (
FE/SO (LIGHTS) PANEL
WARN/CAUTION/ADVISORY SWITCHLIGHT
TEST SWITCHLIGHT
MOVIES SWITCHLIGHT
LIGHTS
FE/SO CLOCK PANEL
NOTE
1 [1-1] CROSS REF. TO SCHEM AND SHEET IN SAME ATA NO.
2 [23-34-00, 2-1] CROSS REF. TO SCHEM IN DIFFERENT ATA NO.
3 ALL REFERENCE DESIGNATIONS ARE PREFIXED WITH 3317 UNLESS OTHERWISE SPECIFIED

Indicator Bright/Dim and Test - Card 1A2 Schematic
SCHEM 6 (Sheet 4)

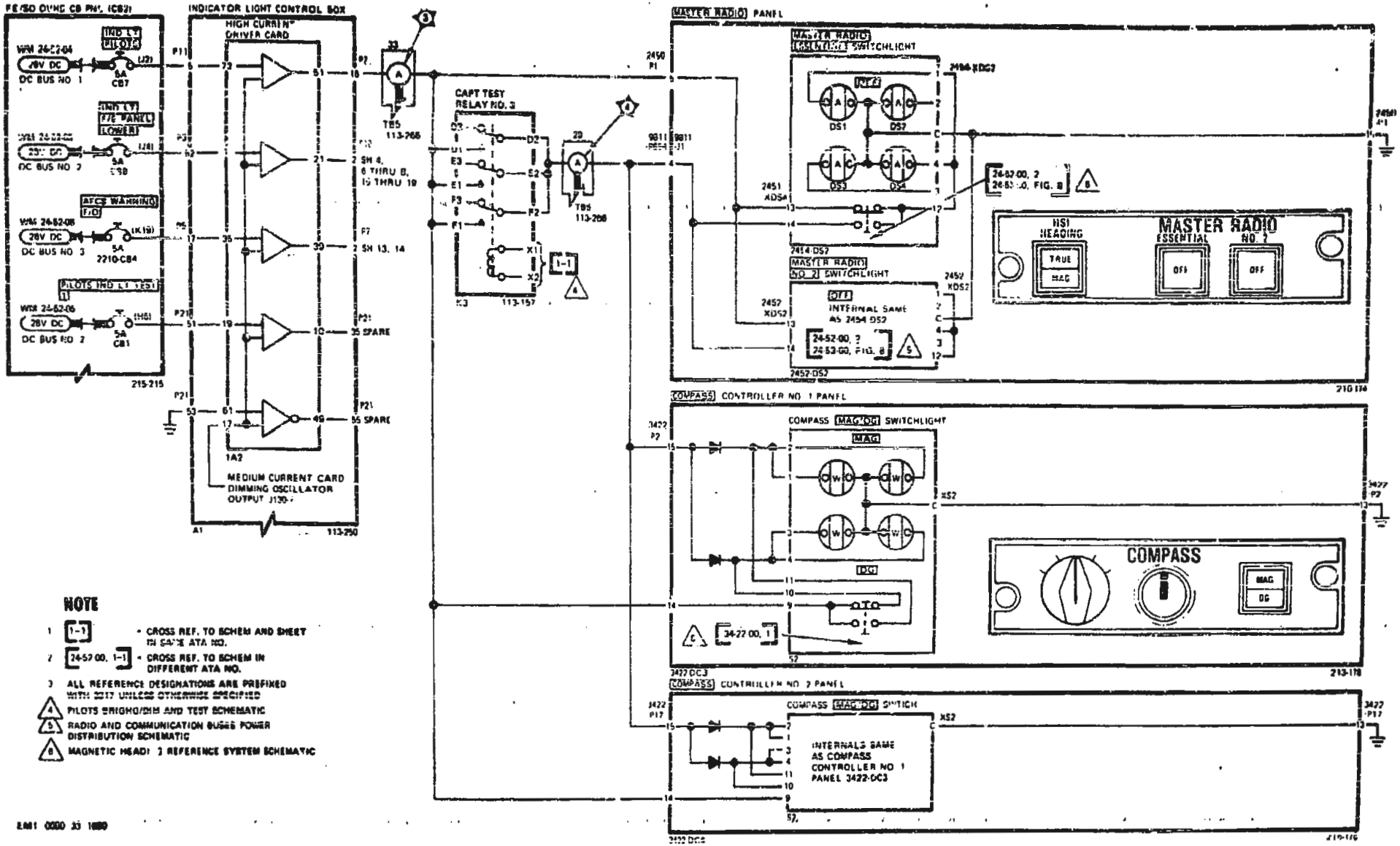

INDICATOR LIGHT CONTROL BOX
HIGH CURRENT DRIVER CARD
MEDIUM CURRENT CARD DIMMING OSCILLATOR OUTPUT J120-7
FE/SO TEST RELAY NO 4
FE/SO LIGHTS PANEL
WARNING/CAUTION/ADVISORY SWITCHLIGHT
TEST SWITCHLIGHT
MOVIES SWITCHLIGHT
FE/SO CLOCK PANEL
LIGHTS
IND LT F E PANEL LOWER
IND LT PILOTS
AFCS WARNING
PILOTS IND LT TEST
NOTE:
1 CROSS REF TO SCHEM AND SHEET IN SAME ATA NO
2 CROSS REF TO SCHEM IN DIFFERENT ATA NO
3 ALL REFERENCE DESIGNATIONS ARE PREFIXED WITH 3317 UNLESS OTHERWISE SPECIFIED
4 FE/SO BRIGHT/DIM AND TEST SCHEMATIC
5 PASSENGER VISUAL ENTERTAINMENT ELECTRICAL SYSTEM SCHEMATIC

Indicator Bright/Dim and Test - Card 1A2 Schematic
SCHEM 6 (Sheet 4)

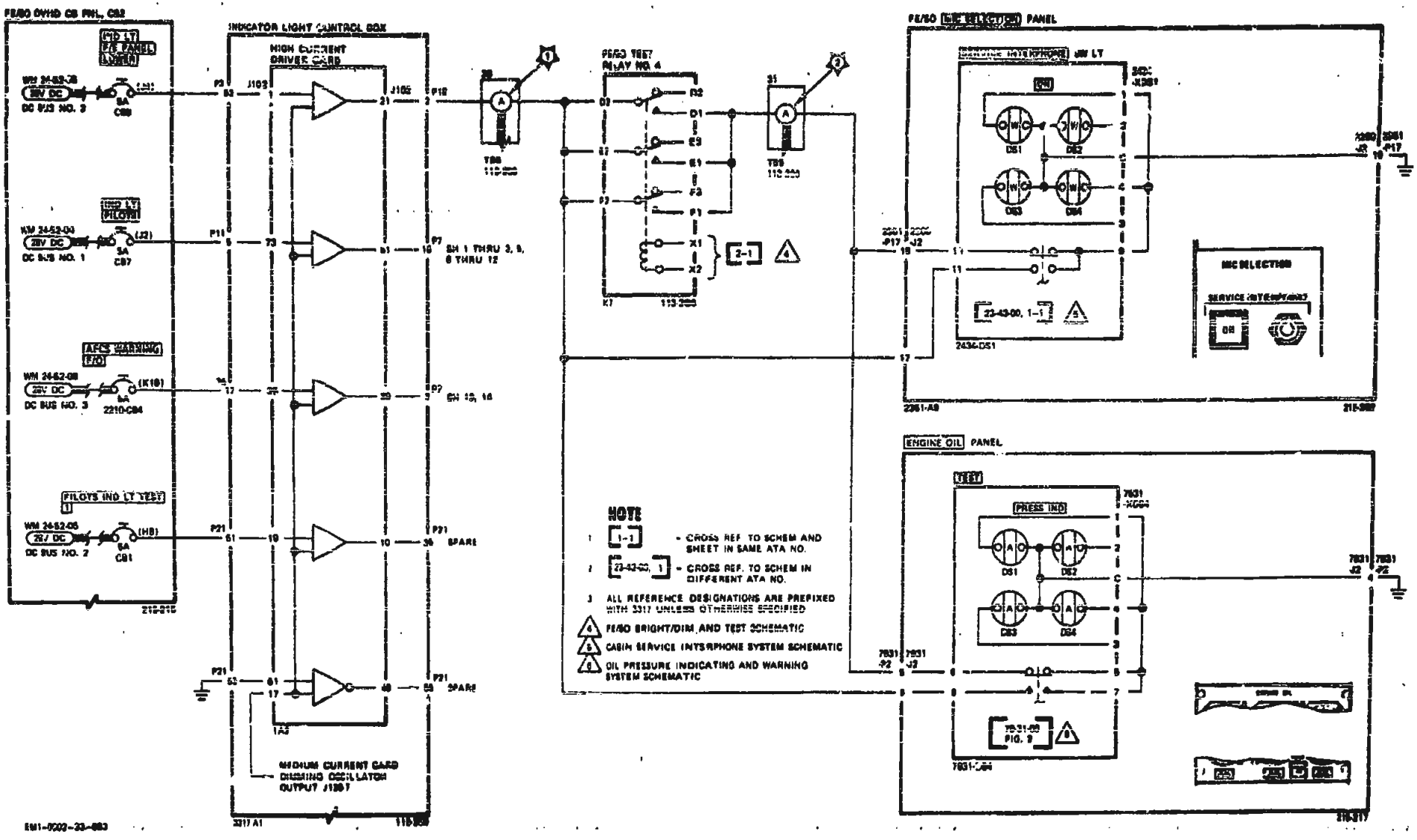
R EFFECTIVITY: 033-999
R
0078


INDICATOR LIGHT CONTROL BOX
HIGH CURRENT DRIVER CARD
MEDIUM CURRENT CARD DIMMING OSCILLATOR OUTPUT J1307
MASTER RADIO PANEL
MASTER RADIO ESSENTIAL SWITCHLIGHT
MASTER RADIO NO. 2 SWITCHLIGHT
MASTER RADIO ESSENTIAL NO. 2
HSI HEADING
TRUE
MAG
OFF
INTERNAL SAME AS 2454 DS2
CAPT TEST RELAY NO. 3
COMPASS CONTROLLER NO 1 PANEL
COMPASS MAG/DG SWITCHLIGHT
COMPASS
MAG
DG
COMPASS CONTROLLER NO 2 PANEL
COMPASS MAG/DG SWITCH
INTERNALS SAME AS COMPASS CONTROLLER NO. 1 PANEL 3422-DC3
NOTE
1 1-1 - CROSS REF. TO SCHEM AND SHEET IN SAME ATA NO.
2 24-52-00, 1-1 - CROSS REF. TO SCHEM IN DIFFERENT ATA NO.
3 ALL REFERENCE DESIGNATIONS ARE PREFIXED WITH 3317 UNLESS OTHERWISE SPECIFIED
4 PILOTS BRIGHT/DIM AND TEST SCHEMATIC
5 RADIO AND COMMUNICATION BUSES POWER DISTRIBUTION SCHEMATIC
6 MAGNETIC HEADING REFERENCE SYSTEM SCHEMATIC
EMI-0001-33-330

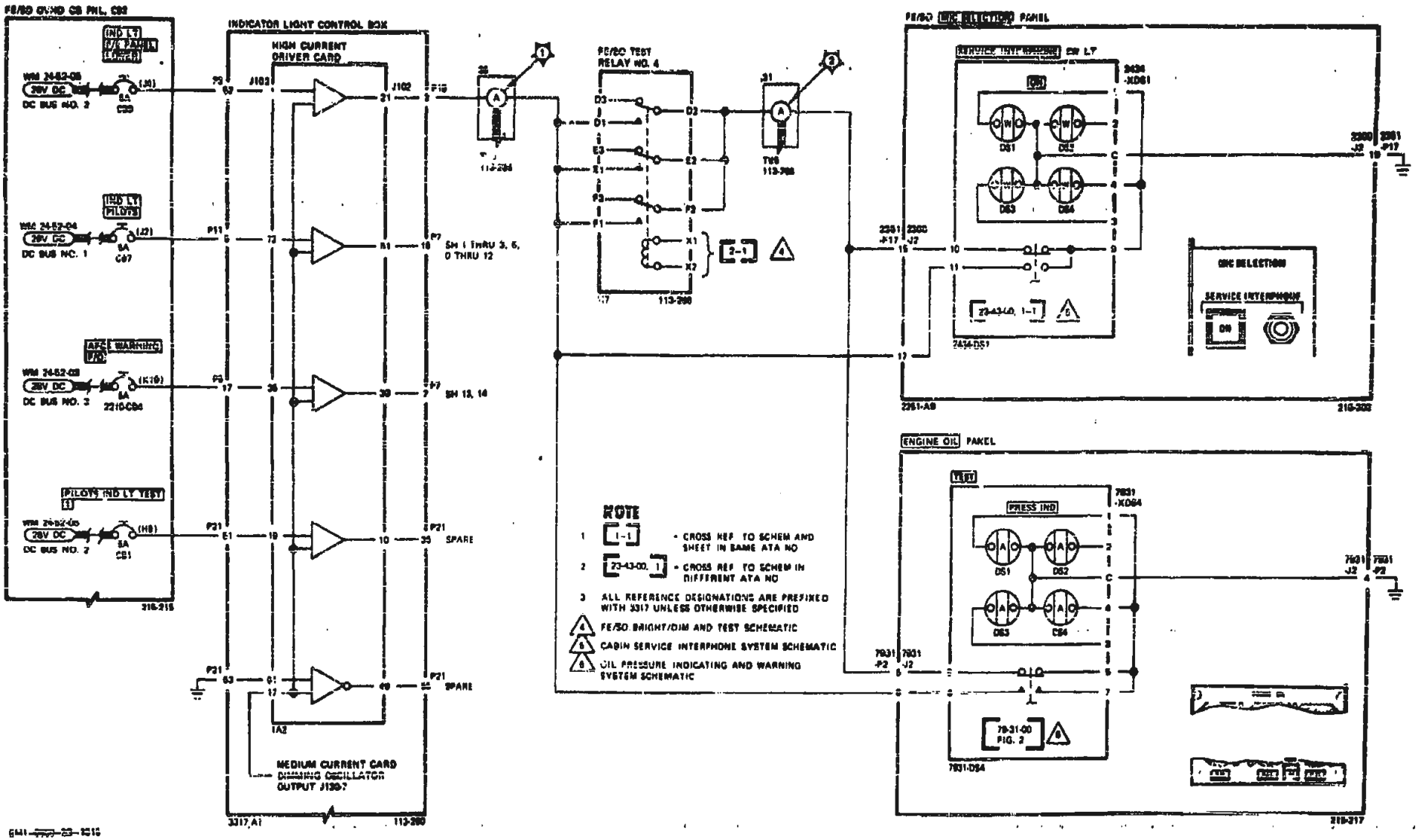
Indicator Bright/Dim and Test - Card 1A2 Schematic
SCHEM 6 (Sheet 5)


INDICATOR LIGHT CONTROL BOX
HIGH CURRENT DRIVER CARD
MASTER RADIO PANEL
MASTER RADIO ESSENTIAL SWITCHLIGHT
MASTER RADIO NO. 2 SWITCHLIGHT
CAPT TEST RELAY NO. 3
COMPASS CONTROLLER NO. 1 PANEL
COMPASS MAG/DG SWITCHLIGHT
COMPASS CONTROLLER NO. 2 PANEL
COMPASS MAG/DG SWITCH
MEDIUM CURRENT CARD
DIMMING OSCILLATOR
OUTPUT J130
INTERNAL SAME AS 2454 DS2
INTERNALS SAME AS COMPASS CONTROLLER NO. 1 PANEL 3422-DC3
HSI HEADING
TRUE
MAG
OFF
COMPASS
MAG
DG
NOTE
1 [1-1] - CROSS REF. TO SCHEM AND SHEET IN SAME ATA NO.
2 [24-52 00, 1-1] - CROSS REF. TO SCHEM IN DIFFERENT ATA NO.
3 ALL REFERENCE DESIGNATIONS ARE PREFIXED WITH 33-17 UNLESS OTHERWISE SPECIFIED
4 PILOTS BRIGHT/DIM AND TEST SCHEMATIC
5 RADIO AND COMMUNICATION BUSES POWER DISTRIBUTION SCHEMATIC
6 MAGNETIC HEADING REFERENCE SYSTEM SCHEMATIC

Indicator Bright/Dim and Test Card 1A2 Schematic
SCHEM 6 (Sheet 5)


INDICATOR LIGHT CONTROL BOX
HIGH CURRENT DRIVER CARD
PILOTS TEST RELAY NO. 4
ENGINE OIL PANEL
PRESS IND
TEST
MIC SELECTION
SERVICE INTERPHONE
HOT MICROPHONE
DC BUS NO. 1
DC BUS NO. 2
DC BUS NO. 3
DC BUS NO. 4
MEDIUM CURRENT CARD
DIMMING OSCILLATOR
OUTPUT J1B7
NOTE
1 [1-1] - CROSS REF. TO SCHEM AND SHEET IN SAME ATA NO.
2 [23-43-00, 1] - CROSS REF. TO SCHEM IN DIFFERENT ATA NO.
3 ALL REFERENCE DESIGNATIONS ARE PREFIXED WITH 3317 UNLESS OTHERWISE SPECIFIED
4 FE/SO BRIGHT/DIM AND TEST SCHEMATIC
5 CABIN SERVICE INTERPHONE SYSTEM SCHEMATIC
6 OIL PRESSURE INDICATING AND WARNING SYSTEM SCHEMATIC

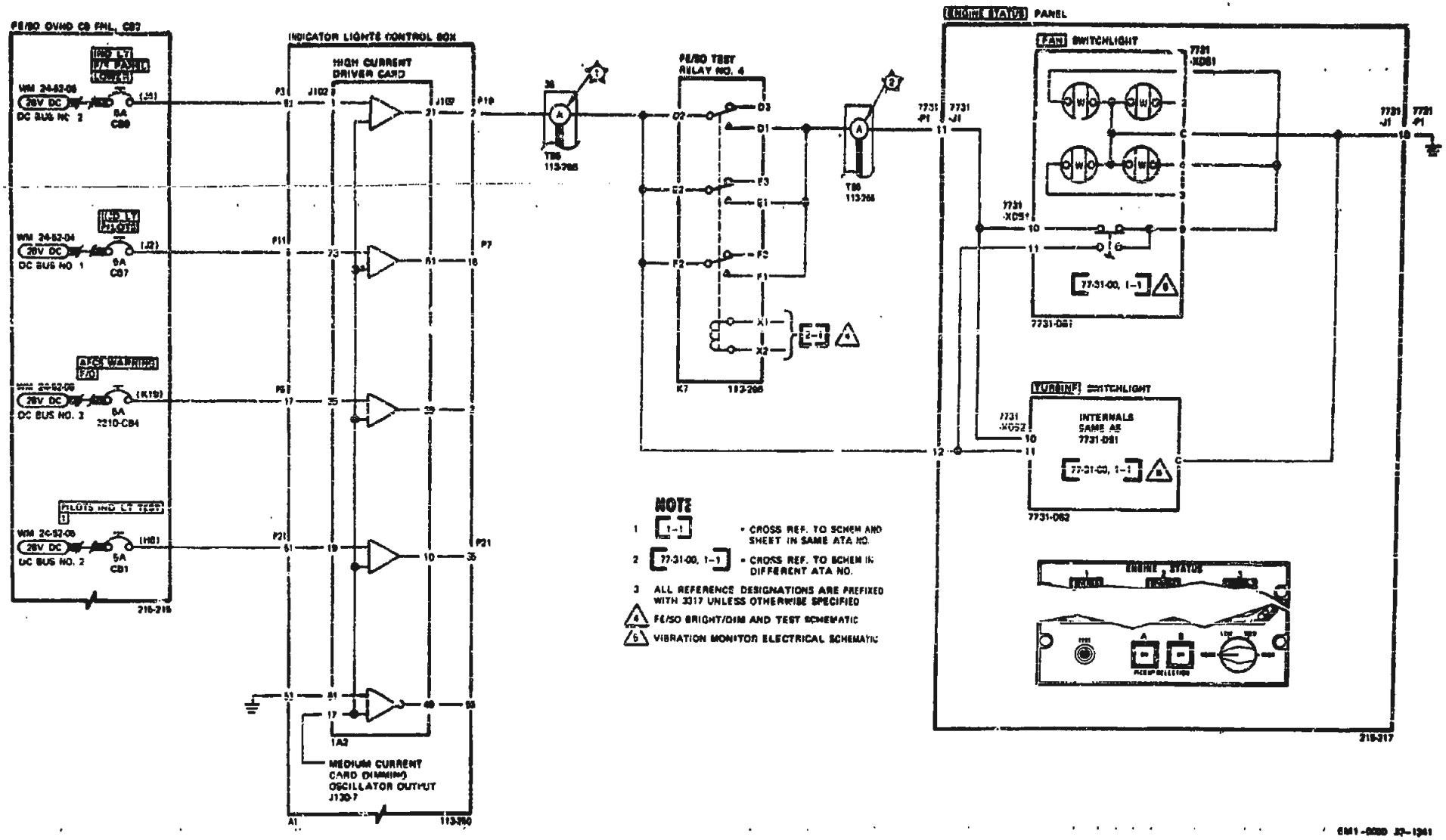
Indicator Bright/Dim and Test - Card 1A2 Schematic
SCHEM 6 (Sheet 6)


INDICATOR LIGHT CONTROL BOX
HIGH CURRENT DRIVER CARD
FE/SO TEST RELAY NO. 4
IND LT P/C PANEL (LOWER)
IND LT PILOTS
AFCS WARNING
PILOTS IND LT TEST
28V DC
DC BUS NO. 2
DC BUS NO. 1
SPARE
MEDIUM CURRENT CARD
DIMMING OSCILLATOR OUTPUT J130-7
ENGINE OIL PANEL
PRESS IND
NOTE
1 [1-1] - CROSS REF TO SCHEM AND SHEET IN SAME ATA NO
2 [23-43-00, 1] - CROSS REF TO SCHEM IN DIFFERENT ATA NO
3 ALL REFERENCE DESIGNATIONS ARE PREFIXED WITH 3317 UNLESS OTHERWISE SPECIFIED
4 FE/SO BRIGHT/DIM AND TEST SCHEMATIC
5 CABIN SERVICE INTERPHONE SYSTEM SCHEMATIC
6 OIL PRESSURE INDICATING AND WARNING SYSTEM SCHEMATIC

Indicator Bright/Dim and Test - Card 1A2 Schematic
SCHEM 6 (Sheet 6)

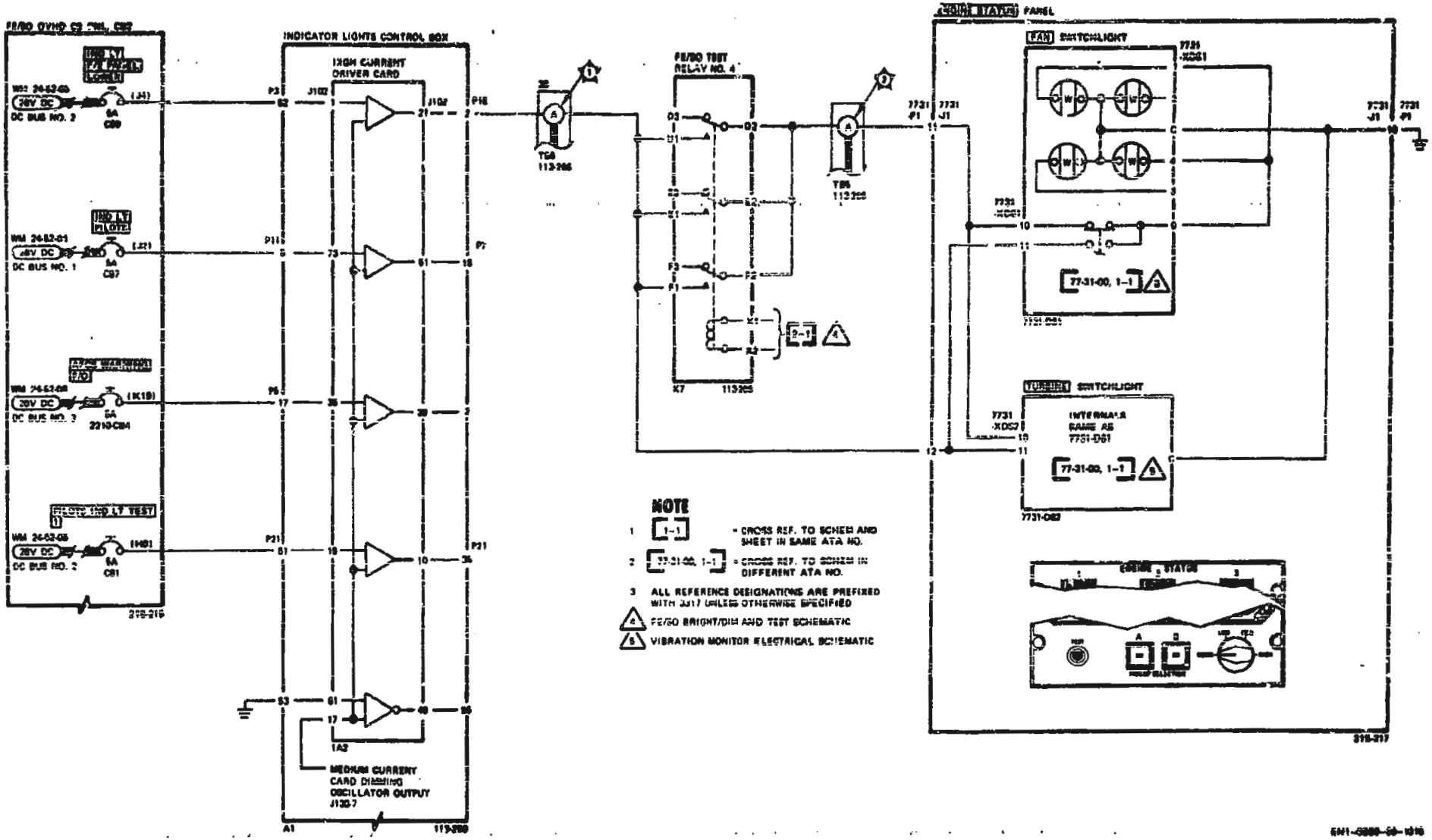
R
R
0078

EFFECTIVITY: 033-999

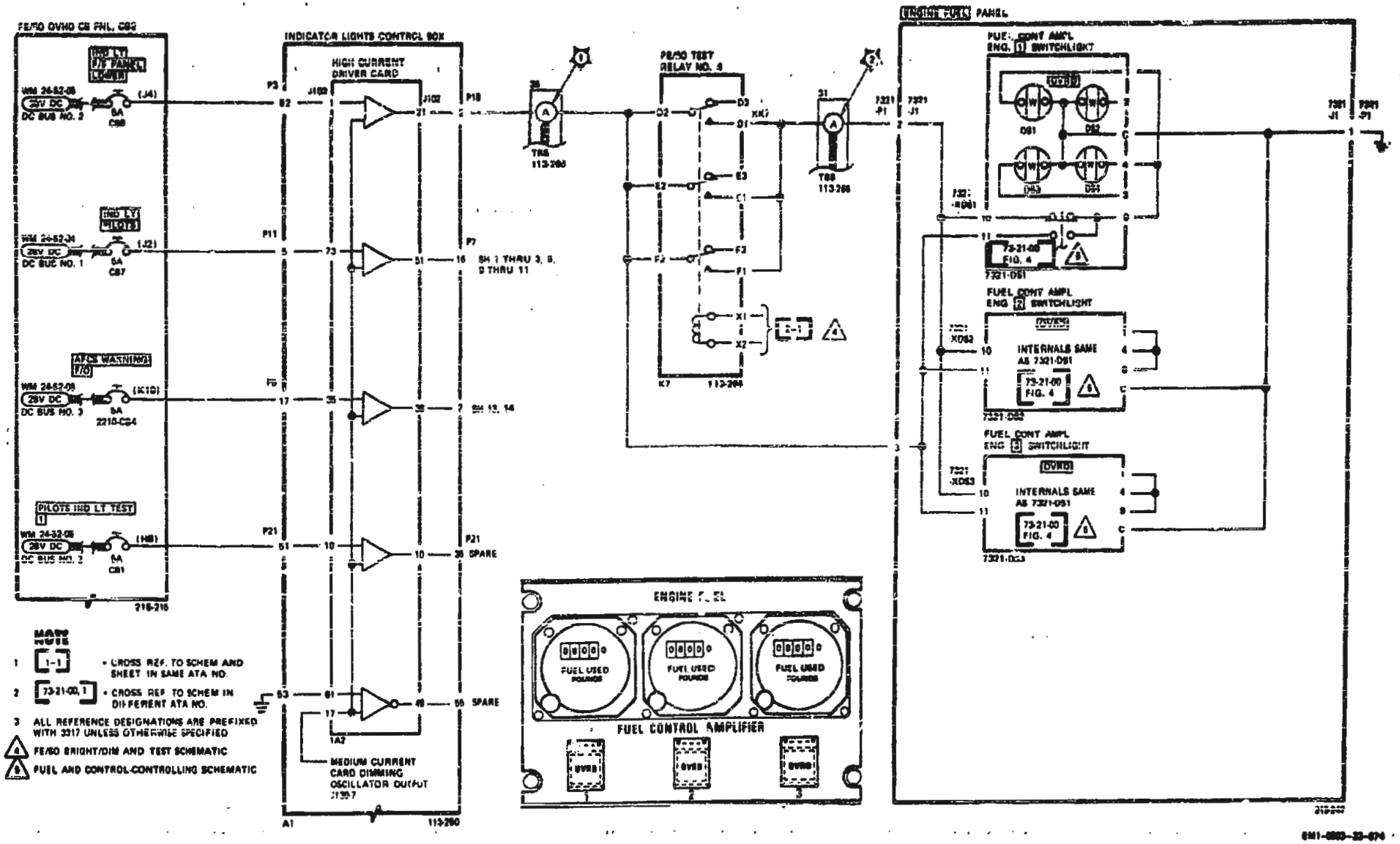

FE/SO OVHD CB PNL, CB2
INDICATOR LIGHTS CONTROL BOX
HIGH CURRENT DRIVER CARD
FE/SO TEST RELAY NO. 4
ENGINE STATUS PANEL
FAN SWITCHLIGHT
TURBINE SWITCHLIGHT
INTERNALS SAME AS 7731-081
ENGINE STATUS
NOTE
1 [1-1] • CROSS REF. TO SCHEM AND SHEET IN SAME ATA NO.
2 [77-31-00, 1-1] • CROSS REF. TO SCHEM IN DIFFERENT ATA NO.
3 ALL REFERENCE DESIGNATIONS ARE PREFIXED WITH 3317 UNLESS OTHERWISE SPECIFIED
4 FE/SO BRIGHT/DIM AND TEST SCHEMATIC
5 VIBRATION MONITOR ELECTRICAL SCHEMATIC
1A2
MEDIUM CURRENT CARD (DIMMING) OSCILLATOR OUTPUT J13D-7

Indicator Bright/Dim and Test - Card 1A2 Schematic
SCHEM 6 (Sheet 7)

R EFFECTIVITY: 001-032
R
007B

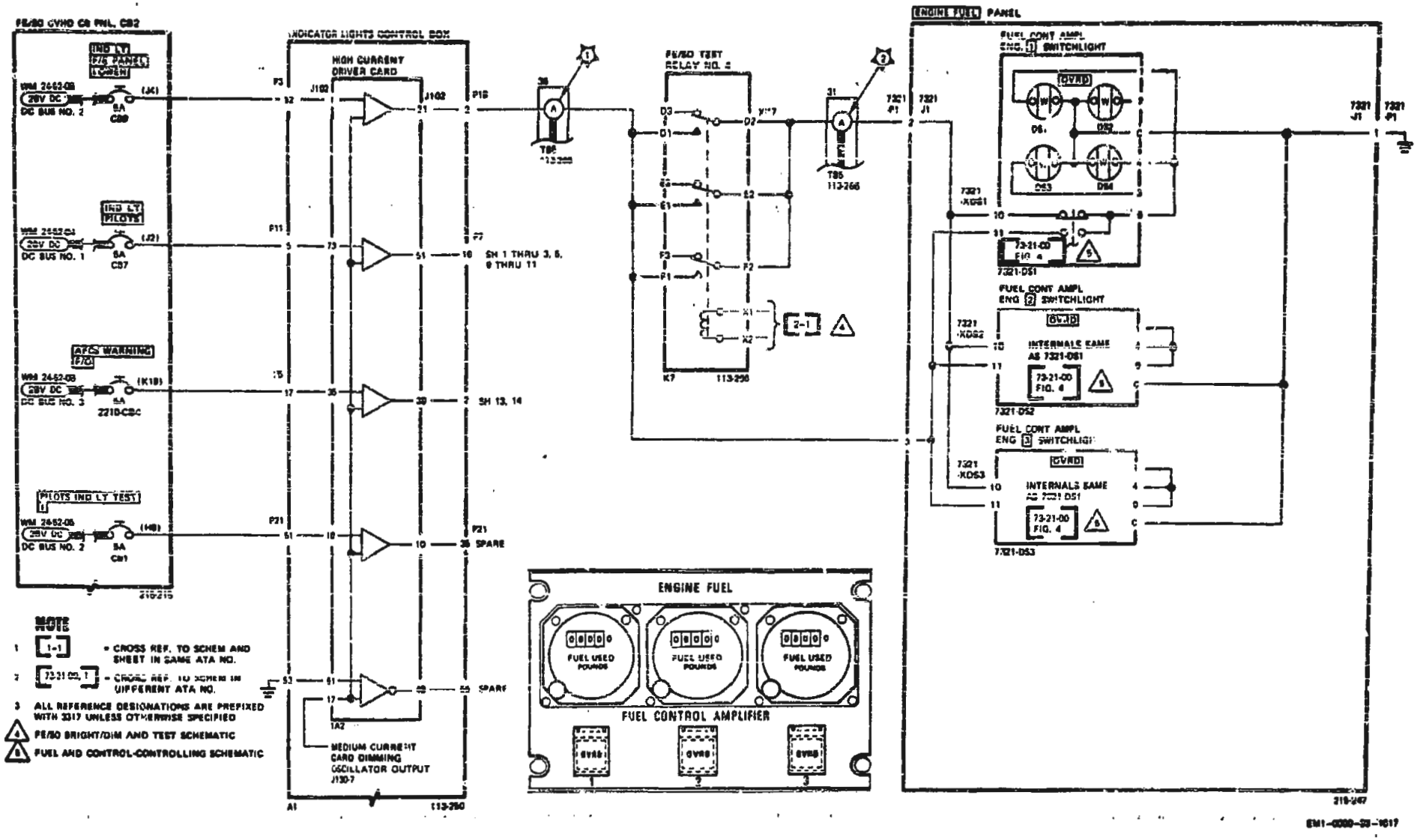

INDICATOR LIGHTS CONTROL BOX
IXGH CURRENT DRIVER CARD
FE/GO TEST RELAY NO. 4
ENGINE STATUS PANEL
FAN SWITCHLIGHT
TURBINE SWITCHLIGHT
INTERNALS SAME AS 7731-D61
DC BUS NO. 2
DC BUS NO. 1
DC BUS NO. 3
MEDIUM CURRENT CARD DIMMING OSCILLATOR OUTPUT J1357
1A2
NOTE
1 [1-1] = CROSS REF. TO SCHEM AND SHEET IN SAME ATA NO.
2 [77-31-00, 1-1] = CROSS REF. TO SCHEM IN DIFFERENT ATA NO.
3 ALL REFERENCE DESIGNATIONS ARE PREFIXED WITH J317 UNLESS OTHERWISE SPECIFIED
4 FE/GO BRIGHT/DIM AND TEST SCHEMATIC
5 VIBRATION MONITOR ELECTRICAL SCHEMATIC

Indicator Bright/Dim and Test - Card 1A2 Schematic
SCHEM 6 (Sheet 7)


FE/EO OVHD CB PNL, C82
INDICATOR LIGHTS CONTROL BOX
HIGH CURRENT DRIVER CARD
FE/EO TEST RELAY NO. 4
ENGINE FUEL PANEL
FUEL CONT AMPL ENG. 1 SWITCHLIGHT
FUEL CONT AMPL ENG 2 SWITCHLIGHT
FUEL CONT AMPL ENG 3 SWITCHLIGHT
INTERNALS SAME AS 7321-051
ENGINE FUEL
FUEL USED POUNDS
FUEL CONTROL AMPLIFIER
MEDIUM CURRENT CARD DIMMING OSCILLATOR OUTPUT J1B7
SPARE
MAIN NOTE
1 CROSS REF. TO SCHEM AND SHEET IN SAME ATA NO.
2 CROSS REF TO SCHEM IN DIFFERENT ATA NO.
3 ALL REFERENCE DESIGNATIONS ARE PREFIXED WITH 3317 UNLESS OTHERWISE SPECIFIED
FE/EO BRIGHT/DIM AND TEST SCHEMATIC
FUEL AND CONTROL-CONTROLLING SCHEMATIC

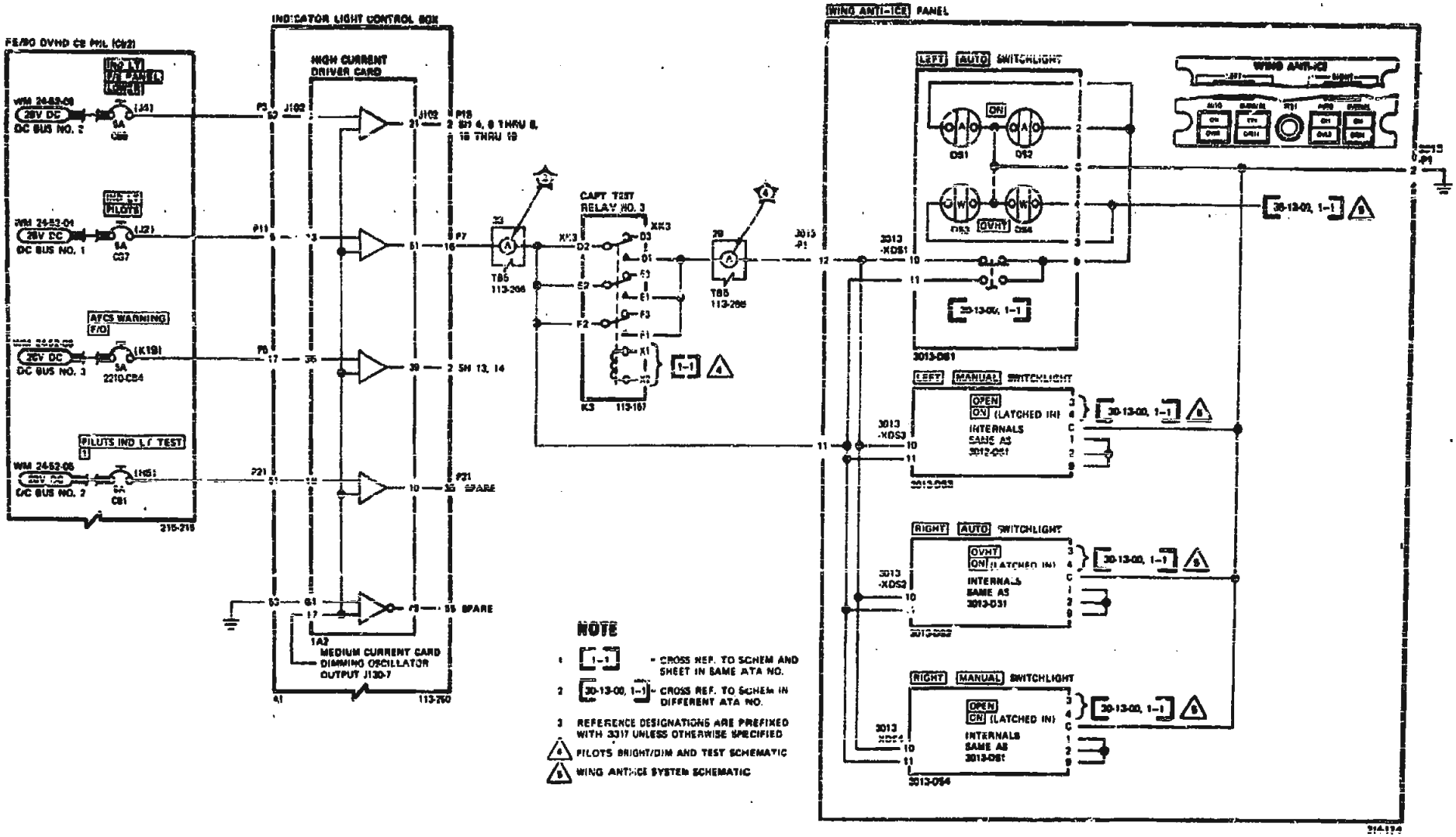
Indicator Bright/Dim and Test - Card 1A2 Schematic
SCHEM 6 (Sheet 8)

R EFFECTIVITY: 001-032
R
007B


FE/SO GVHD CB PNL, CB2
INDICATOR LIGHTS CONTROL BOX
HIGH CURRENT DRIVER CARD
FE/SO TEST RELAY NO. 2
ENGINE FUEL PANEL
FUEL CONT AMPL ENG 1 SWITCHLIGHT
FUEL CONT AMPL ENG 2 SWITCHLIGHT
FUEL CONT AMPL ENG 3 SWITCHLIGHT
IND LT F/E PANEL
IND LT PILOTS
AFCS WARNING F/O
PILOTS IND LT TEST
DC BUS NO. 2
DC BUS NO. 1
DC BUS NO. 3
MEDIUM CURRENT CARD DIMMING OSCILLATOR OUTPUT J130-7
SPARE
SH 1 THRU 3, 5, 9 THRU 11
SH 13, 14
ENGINE FUEL
FUEL USED POUNDS
FUEL CONTROL AMPLIFIER
NOTE
1 CROSS REF. TO SCHEM AND SHEET IN SAME ATA NO.
2 CROSS REF. TO SCHEM IN DIFFERENT ATA NO.
3 ALL REFERENCE DESIGNATIONS ARE PREFIXED WITH 3317 UNLESS OTHERWISE SPECIFIED
A FE/SO BRIGHT/DIM AND TEST SCHEMATIC
B FUEL AND CONTROL-CONTROLLING SCHEMATIC

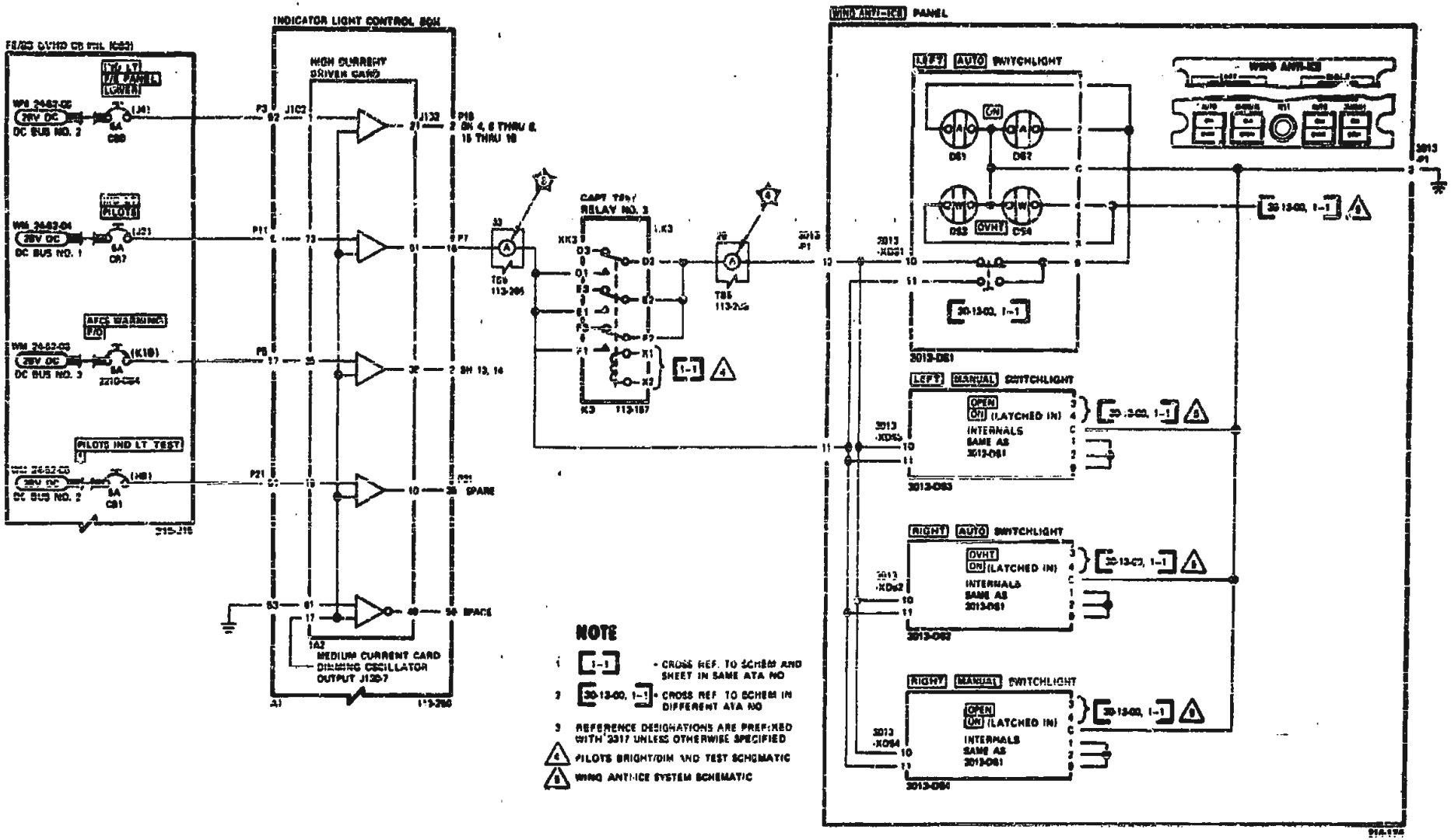
Indicator Bright/Dim and Test - Card 1A2 Schematic
SCHEM 6 (Sheet 8)

R
R
007B EFFECTIVITY: 033-999


INDICATOR LIGHT CONTROL BOX
HIGH CURRENT DRIVER CARD
WING ANTI-ICE PANEL
LEFT AUTO SWITCHLIGHT
RIGHT AUTO SWITCHLIGHT
LEFT MANUAL SWITCHLIGHT
RIGHT MANUAL SWITCHLIGHT
CAPT T2ST RELAY NO. 3
AFCS WARNING F/O
PILOTS IND L/T TEST
28V DC DC BUS NO. 2
28V DC DC BUS NO. 1
28V DC DC BUS NO. 3
1A2 MEDIUM CURRENT CARD DIMMING OSCILLATOR OUTPUT J130-7
SPARE
NOTE
1 CROSS REF. TO SCHEM AND SHEET IN SAME ATA NO.
2 CROSS REF. TO SCHEM IN DIFFERENT ATA NO.
3 REFERENCE DESIGNATIONS ARE PREFIXED WITH 3317 UNLESS OTHERWISE SPECIFIED
A PILOTS BRIGHT/DIM AND TEST SCHEMATIC
B WING ANTI-ICE SYSTEM SCHEMATIC

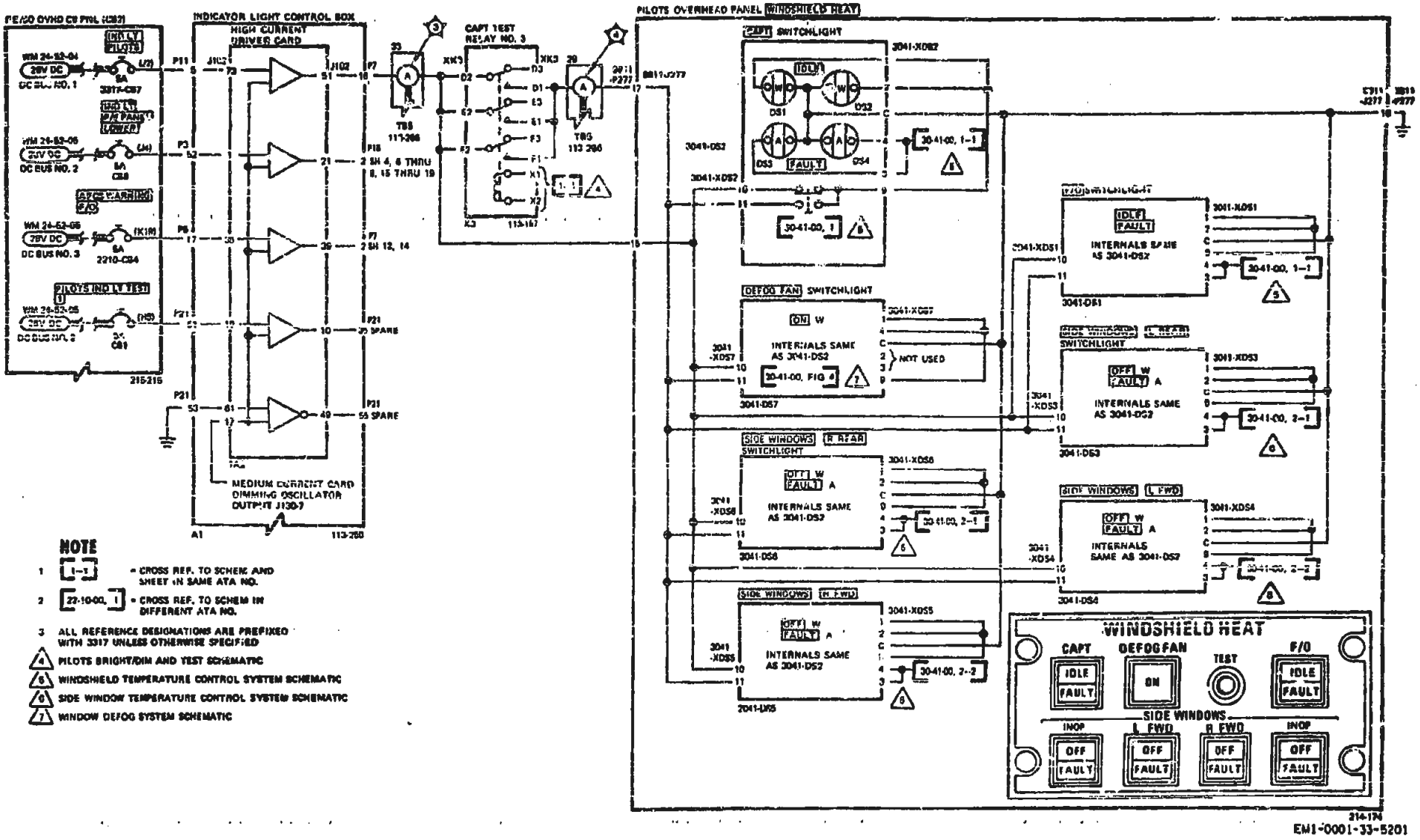
Indicator Bright/Dim and Test - Card 1A2 Schematic
SCHEM 6 (Sheet 9)

R EFFECTIVITY: 001-032
R
007B


INDICATOR LIGHT CONTROL BOX
HIGH CURRENT DRIVER CARD
MEDIUM CURRENT CARD
DIMMING OSCILLATOR OUTPUT J1207
WING ANTI-ICE PANEL
LEFT AUTO SWITCHLIGHT
RIGHT AUTO SWITCHLIGHT
LEFT MANUAL SWITCHLIGHT
RIGHT MANUAL SWITCHLIGHT
OPEN
ON (LATCHED IN)
OVHT
INTERNALS SAME AS 3013-D61
PILOTS IND LT TEST
AFCS WARNING
SPARE
NOTE
1 CROSS REF. TO SCHEM AND SHEET IN SAME ATA NO
2 CROSS REF. TO SCHEM IN DIFFERENT ATA NO
3 REFERENCE DESIGNATIONS ARE PREFIXED WITH '3317 UNLESS OTHERWISE SPECIFIED
4 PILOTS BRIGHT/DIM AND TEST SCHEMATIC
5 WING ANTI-ICE SYSTEM SCHEMATIC

Indicator Bright/Dim and Test - Card 1A2 Schematic
SCHEM 6 (Sheet 9)

R EFFECTIVITY: 033-999
R
007B



NOTE

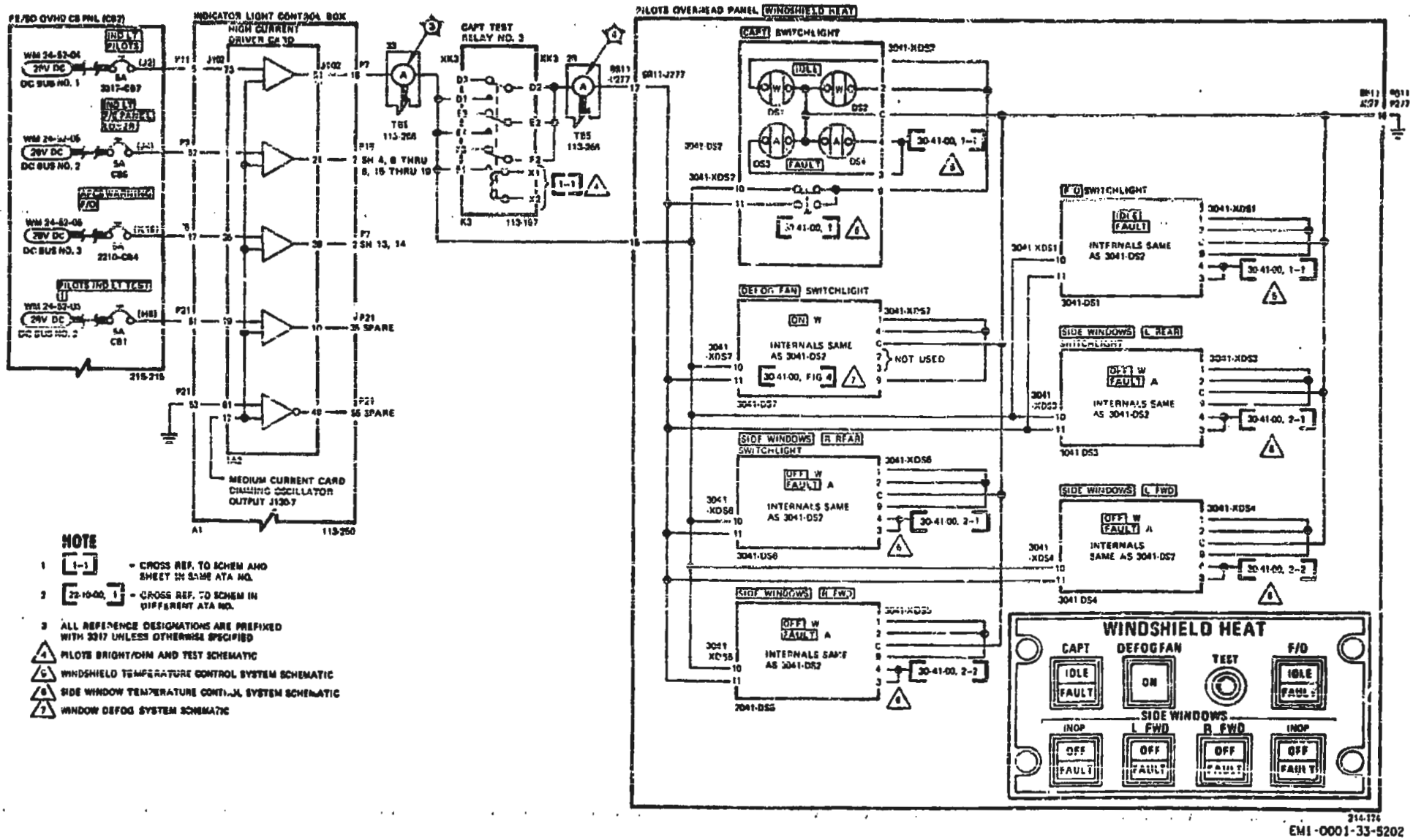
1. [1-1] - CROSS REF. TO SCHEM AND SHEET IN SAME ATA NO.
2. [22-10-00, 1] - CROSS REF. TO SCHEM IN DIFFERENT ATA NO.
3. ALL REFERENCE DESIGNATIONS ARE PREFIXED WITH 3317 UNLESS OTHERWISE SPECIFIED
4. PILOTS BRIGHT/DIM AND TEST SCHEMATIC
5. WINDSHIELD TEMPERATURE CONTROL SYSTEM SCHEMATIC
6. SIDE WINDOW TEMPERATURE CONTROL SYSTEM SCHEMATIC
7. WINDOW DEFOG SYSTEM SCHEMATIC

214-174
EM1-0001-33-5201

R Indicator Bright/Dim and Test - Card 1A2 Schematic
R SCHEM 6 (Sheet 10)

EFFECTIVITY: 001-032

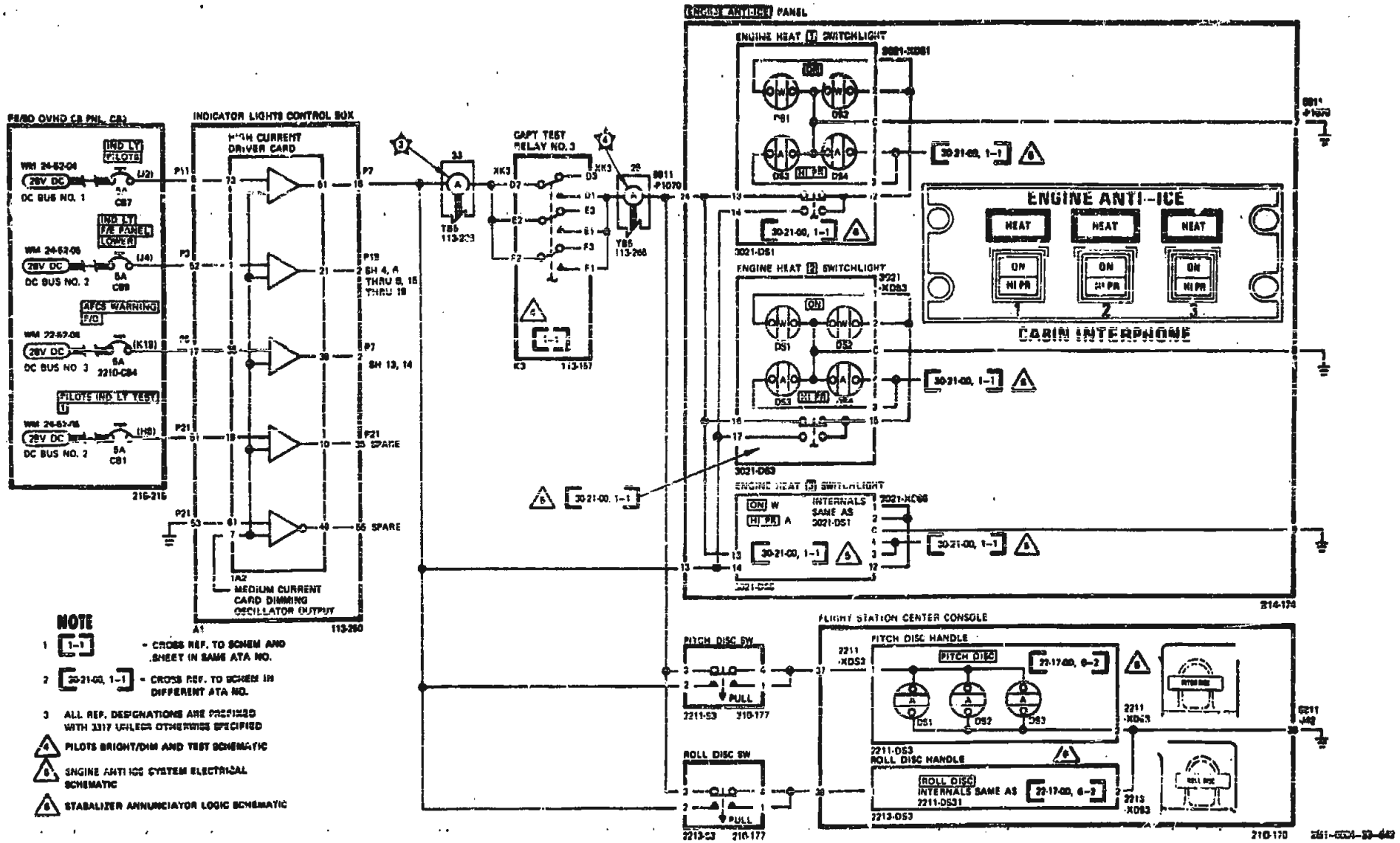
007B



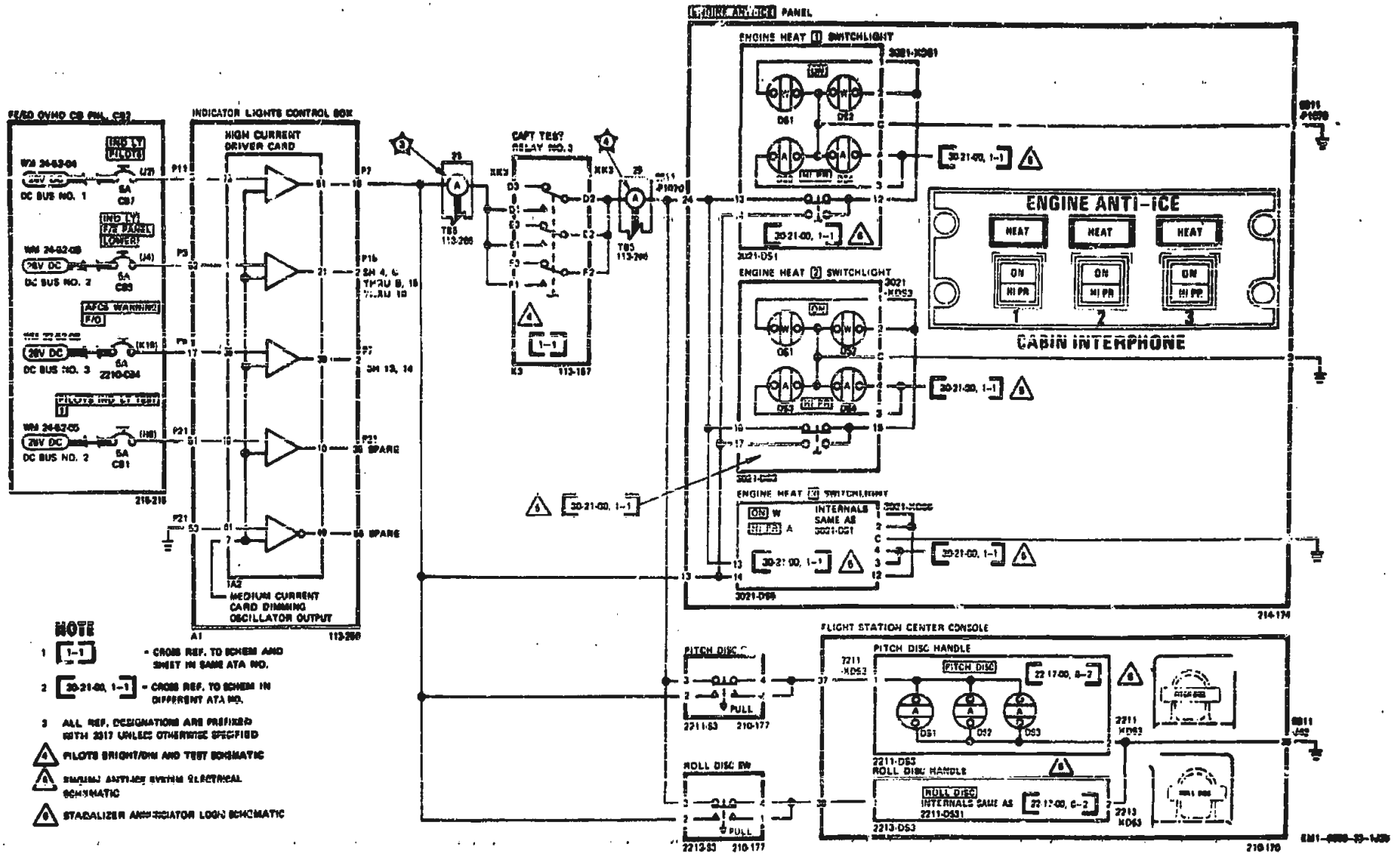
EM1-0001-33-5202

R Indicator Bright Dim and Test - Card 1A25 Schematic
R SCHEM 6 (Sheet 10)

EFFECTIVITY: 033-999

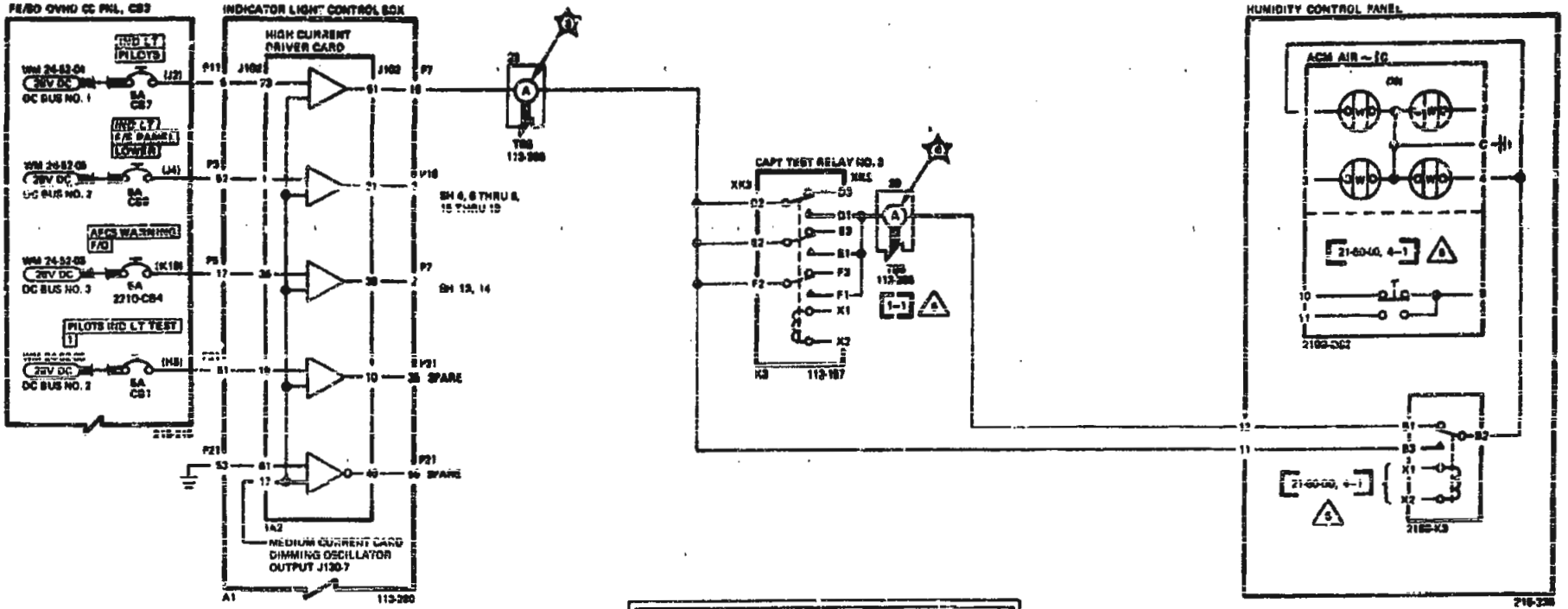

INDICATOR LIGHTS CONTROL BOX
HIGH CURRENT DRIVER CARD
CAPT TEST RELAY NO. 3
ENGINE ANTI-ICE PANEL
ENGINE HEAT (1) SWITCHLIGHT
ENGINE HEAT (2) SWITCHLIGHT
ENGINE HEAT (3) SWITCHLIGHT
ENGINE ANTI-ICE
HEAT
ON
HI PR
CABIN INTERPHONE
FLIGHT STATION CENTER CONSOLE
PITCH DISC SW
ROLL DISC SW
PITCH DISC HANDLE
ROLL DISC HANDLE
PULL
DC BUS NO. 1
DC BUS NO. 2
DC BUS NO. 3
MEDIUM CURRENT CARD DIMMING OSCILLATOR OUTPUT
SPARE
NOTE
1 - CROSS REF. TO SCHEM AND SHEET IN SAME ATA NO.
2 - CROSS REF. TO SCHEM IN DIFFERENT ATA NO.
3 ALL REF. DESIGNATIONS ARE PREFIXED WITH 3317 UNLESS OTHERWISE SPECIFIED
4 PILOTS BRIGHT/DIM AND TEST SCHEMATIC
5 ENGINE ANTI ICE SYSTEM ELECTRICAL SCHEMATIC
6 STABALIZER ANNUNCIATOR LOGIC SCHEMATIC

Indicator Bright/Dim and Test - Card 1A2 Schematic
SCHEM 5 (Sheet 11)



Indicator Bright/Dim and Test - Card 1A2 Schematic
SCHEM 6 (Sheet 1)

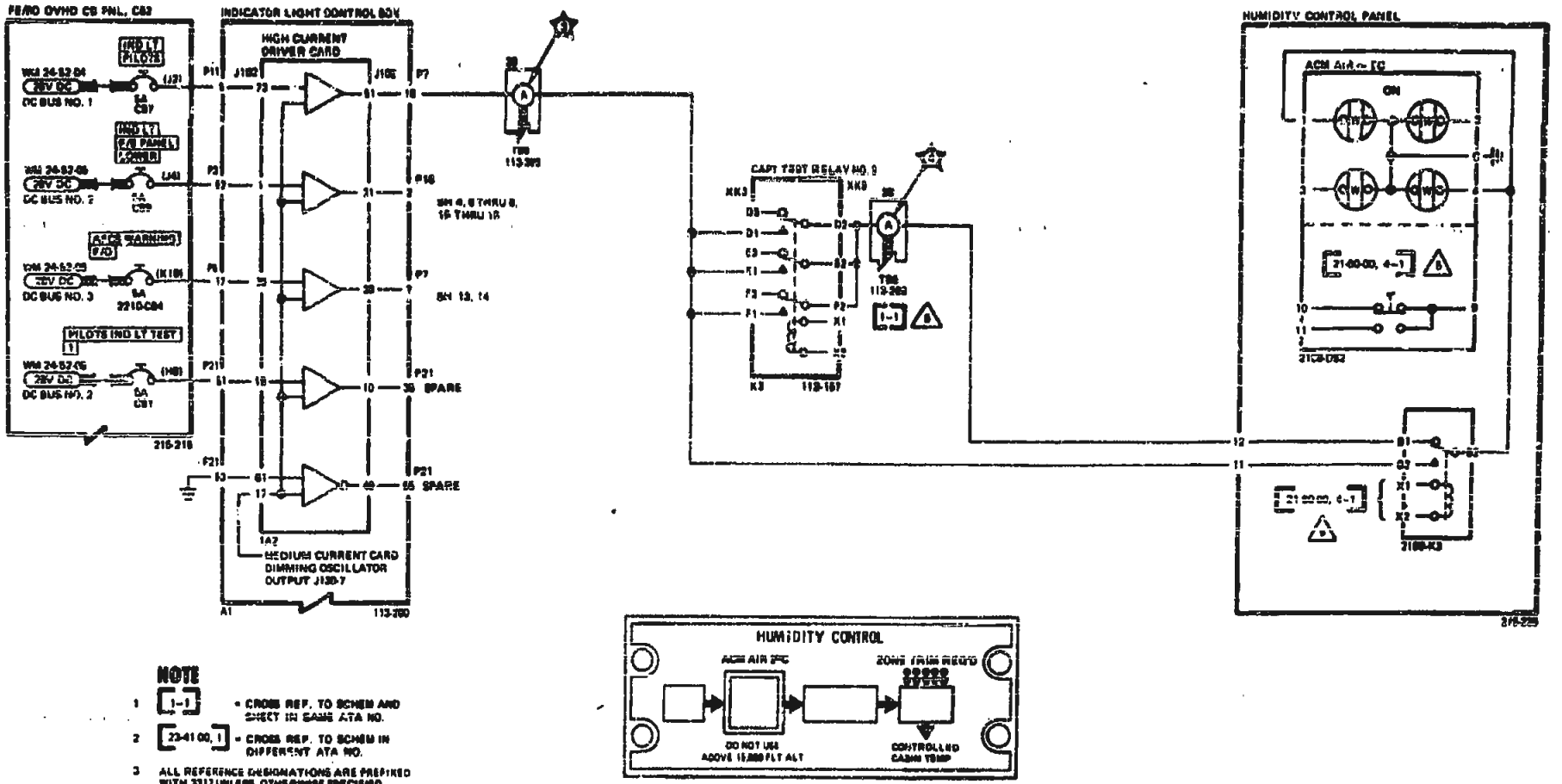
R EFFECTIVITY: 033-999
R
0078



NOTE

1. [1-1] - CROSS REF. TO SCHEM AND SHEET IN SAME ATA NO.
2. [23-41 09, 1] - CROSS REF. TO SCHEM IN DIFFERENT ATA NO.
3. ALL REFERENCE DESIGNATIONS ARE PREFIXED WITH 3317 UNLESS OTHERWISE SPECIFIED
4. PILOTS BRIGHT/DIM TEST SCHEMATIC
5. ZONE/PACK TEMPERATURE CONTROLLERS INTERCONNECTION SCHEMATIC

Indicator Bright/Dim and Test - Card 1A2 Schematic
SCHEM 6 (Sheet 12)



NOTE

1 [1-1] - CROSS REF. TO SCHEM AND SHEET IN SAME ATA NO.

2 [23-41 00, 1] - CROSS REF. TO SCHEM IN DIFFERENT ATA NO.

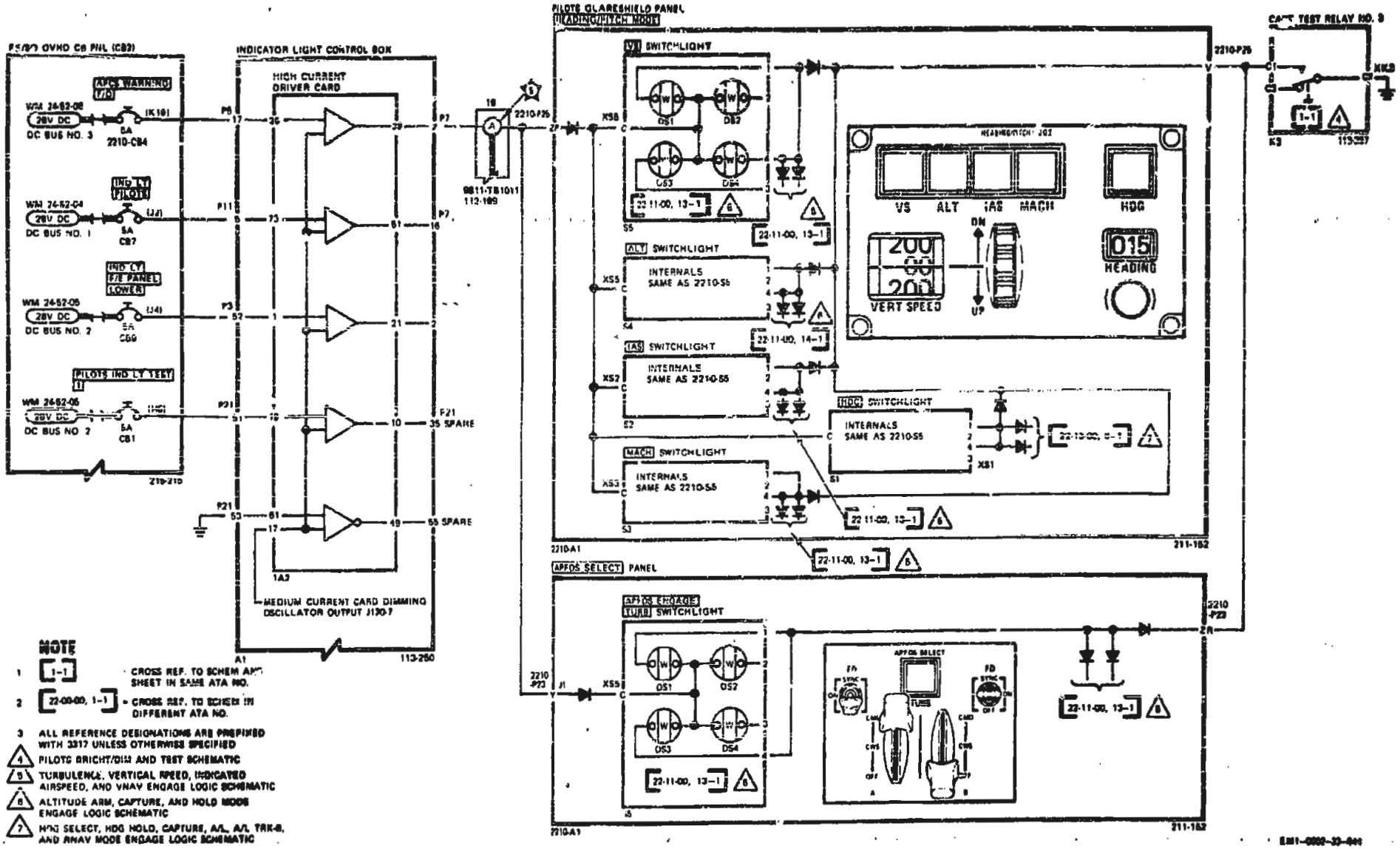
3 ALL REFERENCE DESIGNATIONS ARE PREFIXED WITH 3317 UNLESS OTHERWISE SPECIFIED

4 PILOTS BRIGHT/DIM TEST SCHEMATIC

5 ZONE/PACK TEMPERATURE CONTROLLERS INTERCONNECTION SCHEMATIC

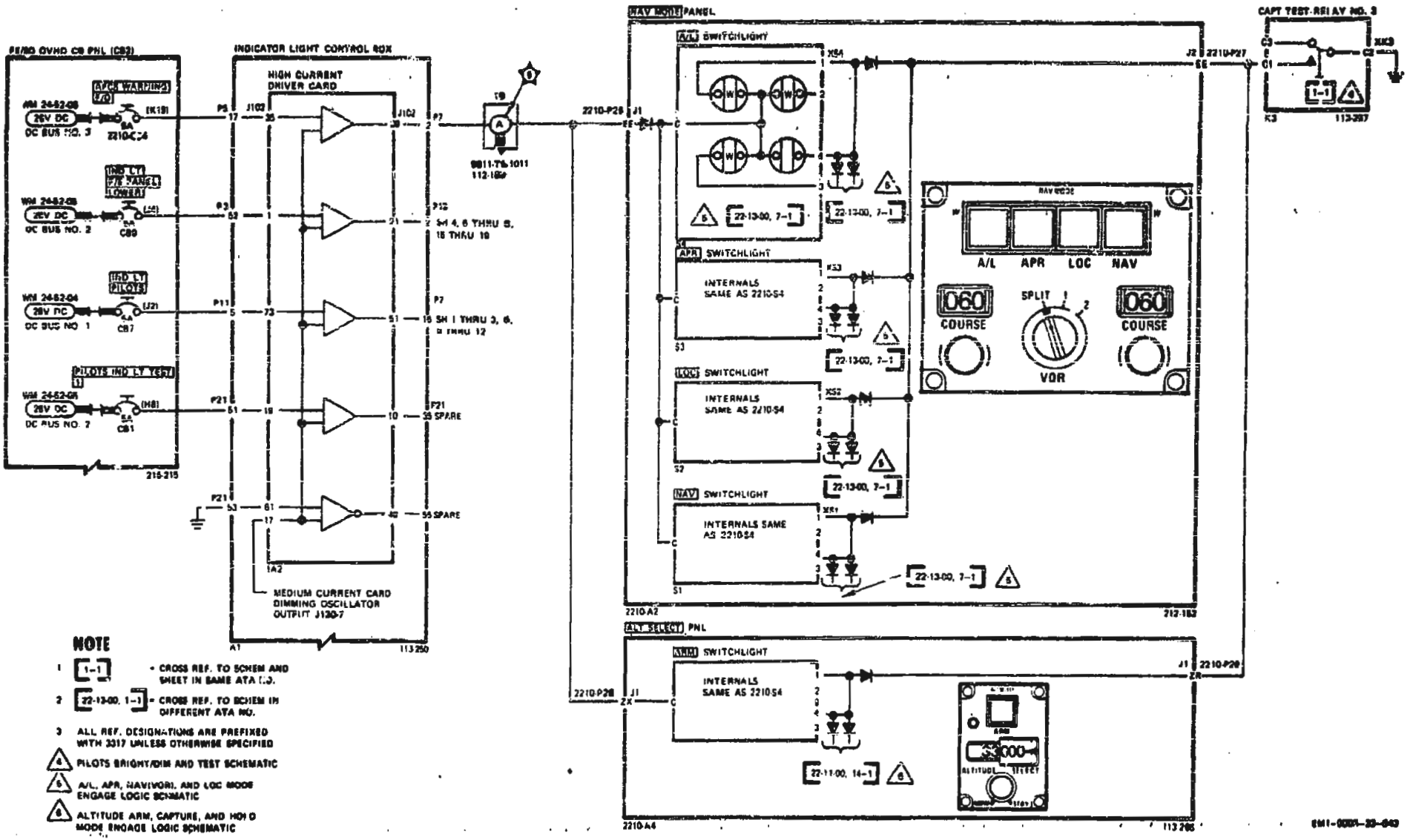
Indicator Bright/Dim and Test - Card 1A2 Schematic
SCHEM 6 (Sheet 12)

R EFFECTIVITY: 033-999
R
0078


INDICATOR LIGHT CONTROL BOX
HIGH CURRENT DRIVER CARD
MEDIUM CURRENT CARD DIMMING OSCILLATOR OUTPUT J130-7
PILOTS GLARESHIELD PANEL
VS SWITCHLIGHT
ALT SWITCHLIGHT
IAS SWITCHLIGHT
HDG SWITCHLIGHT
MACH SWITCHLIGHT
INTERNALS SAME AS 2210-S5
APFDS SELECT PANEL
APFDS ENGAGE TURB SWITCHLIGHT
VS ALT IAS MACH HDG
VERT SPEED
HEADING
CAPT TEST RELAY NO. 3
PILOTS IND LT TEST
SPARE
NOTE
CROSS REF. TO SCHEM ANY SHEET IN SAME ATA NO.
CROSS REF. TO SCHEM IN DIFFERENT ATA NO.
ALL REFERENCE DESIGNATIONS ARE PREFIXED WITH 3317 UNLESS OTHERWISE SPECIFIED
PILOTS BRIGHT/DIM AND TEST SCHEMATIC
TURBULENCE, VERTICAL SPEED, INDICATED AIRSPEED, AND VNAV ENGAGE LOGIC SCHEMATIC
ALTITUDE ARM, CAPTURE, AND HOLD MODE ENGAGE LOGIC SCHEMATIC
HDG SELECT, HDG HOLD, CAPTURE, A/L, A/L TRK-B, AND RNAV MODE ENGAGE LOGIC SCHEMATIC

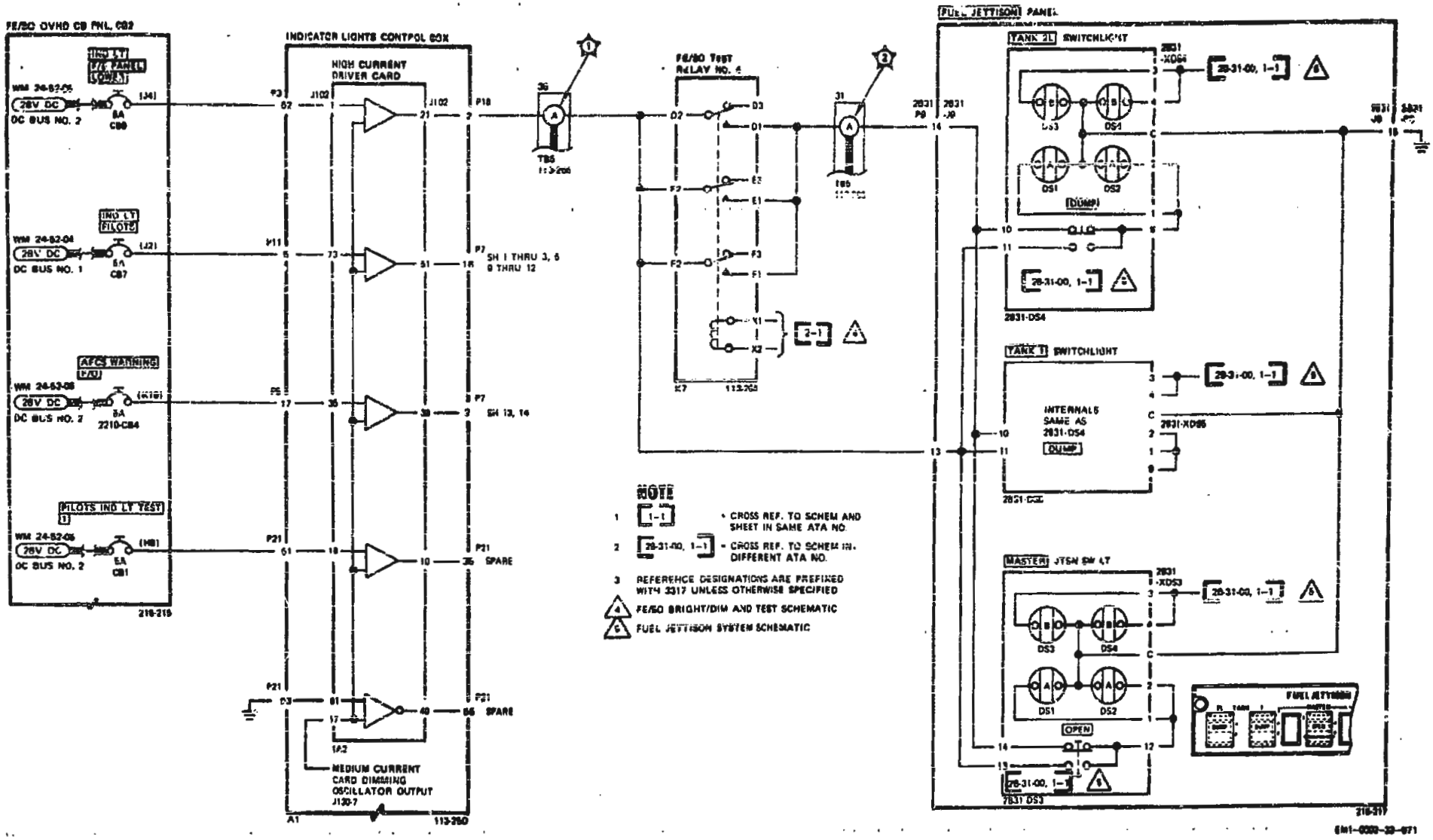
Indicator Bright/Dim and Test - Card 1A2 Schematic
SCHEM 6 (Sheet 13)

R EFFECTIVITY: ALL
R
0078


INDICATOR LIGHT CONTROL BOX
HIGH CURRENT DRIVER CARD
MEDIUM CURRENT CARD DIMMING OSCILLATOR OUTPUT J130-7
NAV MODE PANEL
A/L SWITCHLIGHT
APR SWITCHLIGHT
LOC SWITCHLIGHT
NAV SWITCHLIGHT
ALT SELECT PNL
ANN SWITCHLIGHT
INTERNALS SAME AS 2210-S4
A/L APR LOC NAV
COURSE
SPLIT
VOR
CAPT TEST RELAY NO. 3
NOTE
1 [1-1] - CROSS REF. TO SCHEM AND SHEET IN SAME ATA NO.
2 [22-13-00, 1-1] - CROSS REF. TO SCHEM IN DIFFERENT ATA NO.
3 ALL REF. DESIGNATIONS ARE PREFIXED WITH 3317 UNLESS OTHERWISE SPECIFIED
4 PILOTS BRIGHT/DIM AND TEST SCHEMATIC
5 A/L, APR, NAV/VOR, AND LOC MODE ENGAGE LOGIC SCHEMATIC
6 ALTITUDE ARM, CAPTURE, AND HOLD MODE ENGAGE LOGIC SCHEMATIC

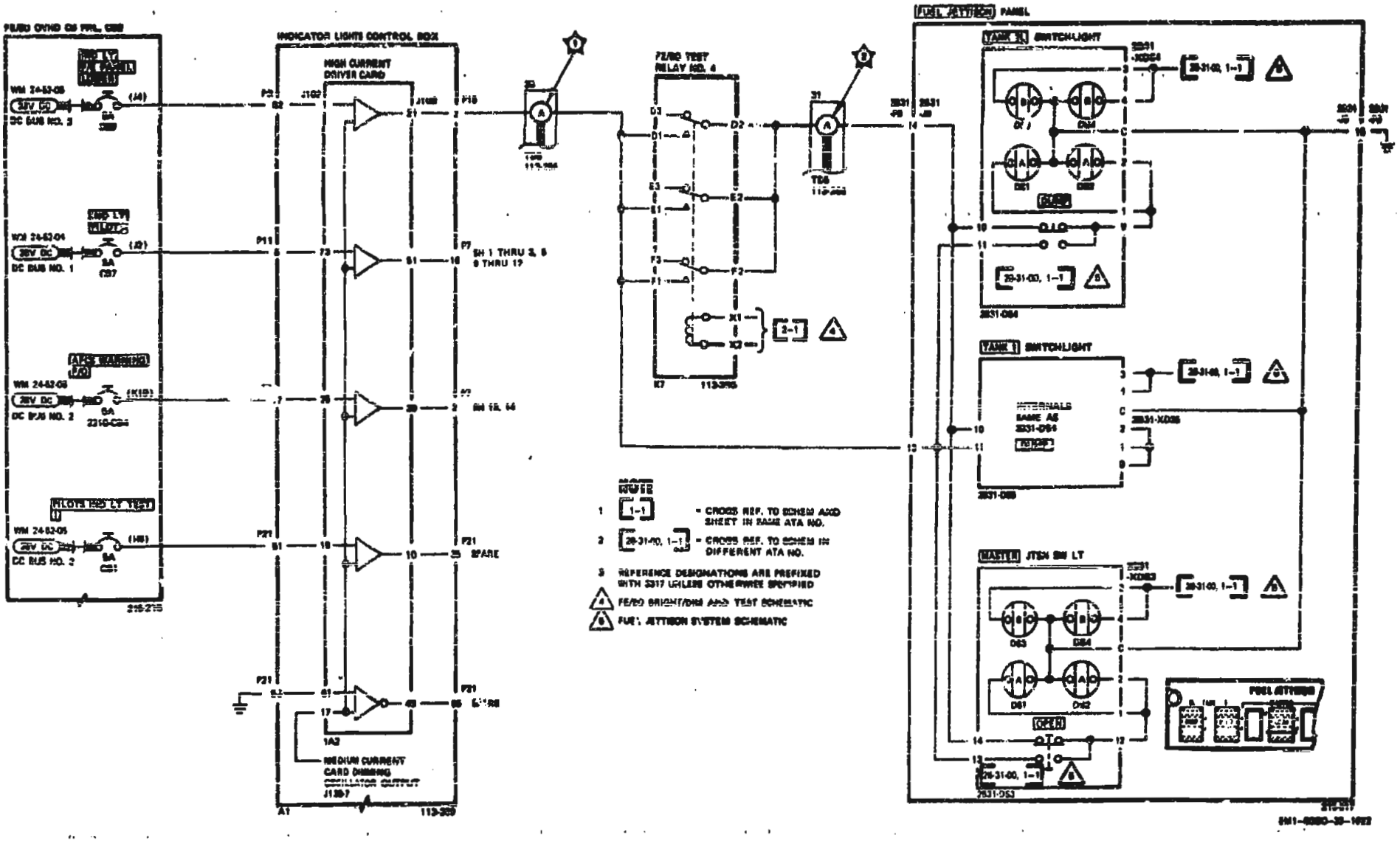
Indicator Bright/Dim and Test - Card 1A2 Schematic
SCHEM 6 (Sheet 14)

R EFFECTIVITY: ALL
R
007B


FE/SO OVHD CB PNL, C82
INDICATOR LIGHTS CONTROL BOX
HIGH CURRENT DRIVER CARD
FE/SO TEST RELAY NO. 4
FUEL JETTISON PANEL
TANK 2L SWITCHLIGHT
TANK 1 SWITCHLIGHT
MASTER JTSN SW 47
INTERNALS SAME AS 2831-DS4
DUMP
OPEN
FUEL JETTISON
IND LT F/E PANEL LOWER
IND LT PILOTS
AFCS WARNING
PILOTS IND LT TEST
28V DC
DC BUS NO. 2
DC BUS NO. 1
MEDIUM CURRENT CARD DIMMING OSCILLATOR OUTPUT J120-7
SPARE
NOTE
1 CROSS REF. TO SCHEM AND SHEET IN SAME ATA NO.
2 CROSS REF. TO SCHEM IN DIFFERENT ATA NO.
3 REFERENCE DESIGNATIONS ARE PREFIXED WITH 3317 UNLESS OTHERWISE SPECIFIED
4 FE/SO BRIGHT/DIM AND TEST SCHEMATIC
5 FUEL JETTISON SYSTEM SCHEMATIC

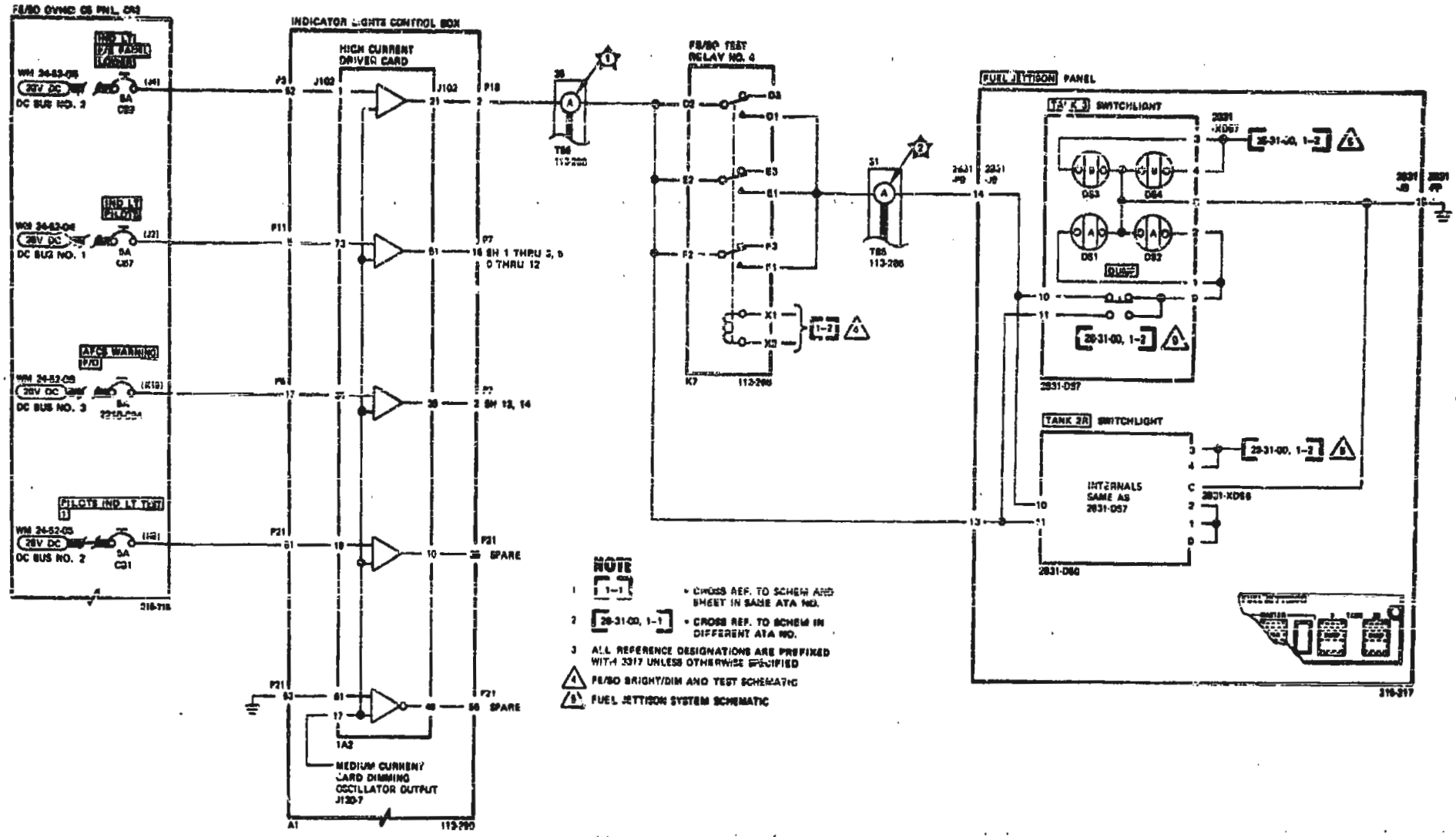
Indicator Bright/Dim and Test - Card 1A2 Schematic
SCHEM 6 (Sheet 15)

R EFFECTIVITY: 001-032
R
0076

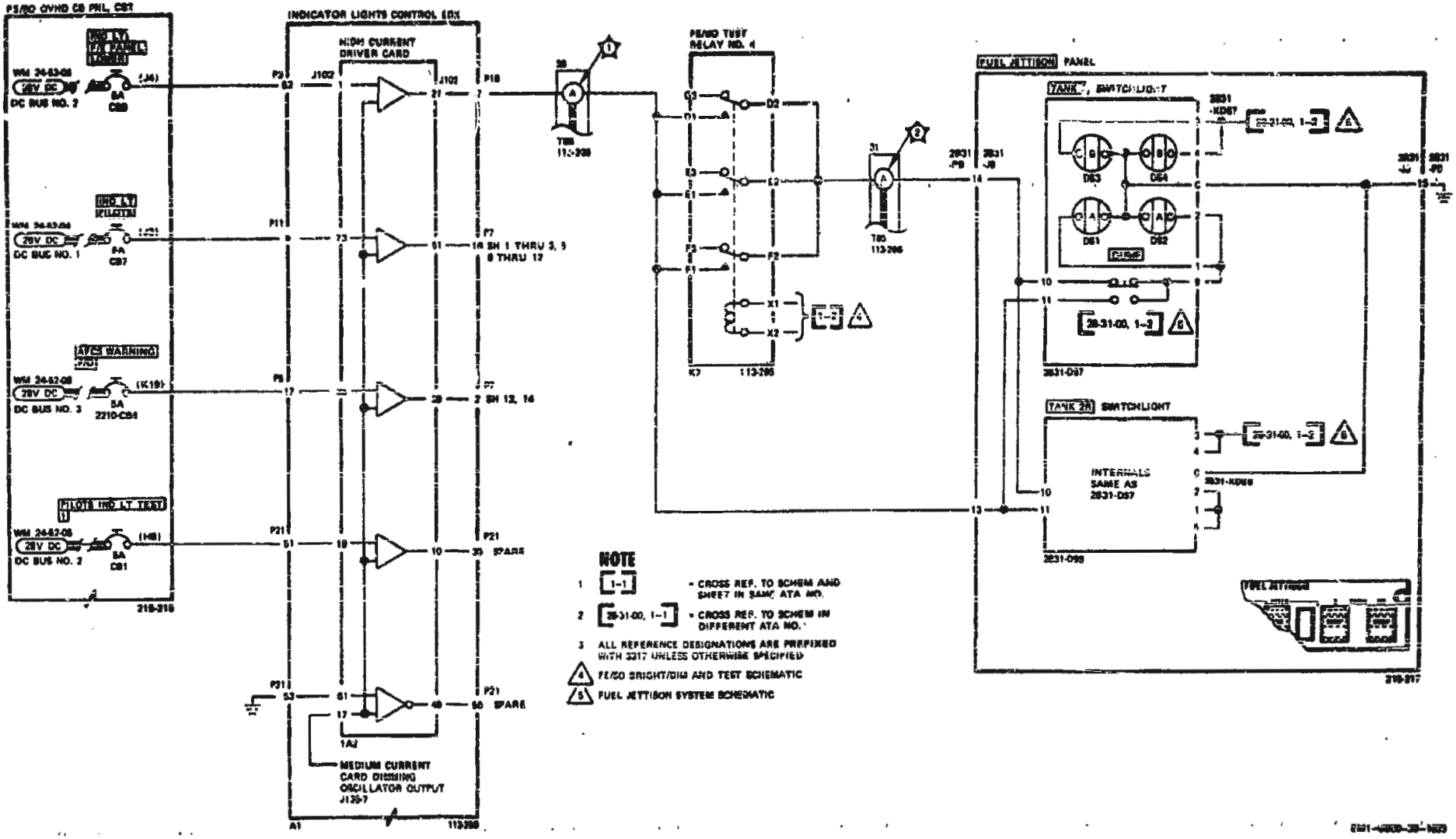

INDICATOR LIGHTS CONTROL BOX
HIGH CURRENT DRIVER CARD
FE/BD TEST RELAY NO. 4
FUEL JETTISON PANEL
TANK 3 SWITCHLIGHT
TANK 1 SWITCHLIGHT
MASTER JTSN SW LT
INTERNALS SAME AS 3331-D64
OPEN
CLOSE
DC BUS NO. 3
DC BUS NO. 1
DC BUS NO. 2
MEDIUM CURRENT CARD DIMMING
1A2
NOTES
1 1-1 = CROSS REF. TO SCHEM AND SHEET IN SAME ATA NO.
2 28-31-00, 1-1 = CROSS REF. TO SCHEM IN DIFFERENT ATA NO.
3 REFERENCE DESIGNATIONS ARE PREFIXED WITH 3317 UNLESS OTHERWISE SPECIFIED
A FE/BD BRIGHT/DIM AND TEST SCHEMATIC
B FUEL JETTISON SYSTEM SCHEMATIC

Indicator Bright/Dim and Test - Card 1A2 Schematic
SCHEM 6 (Sheet 15)

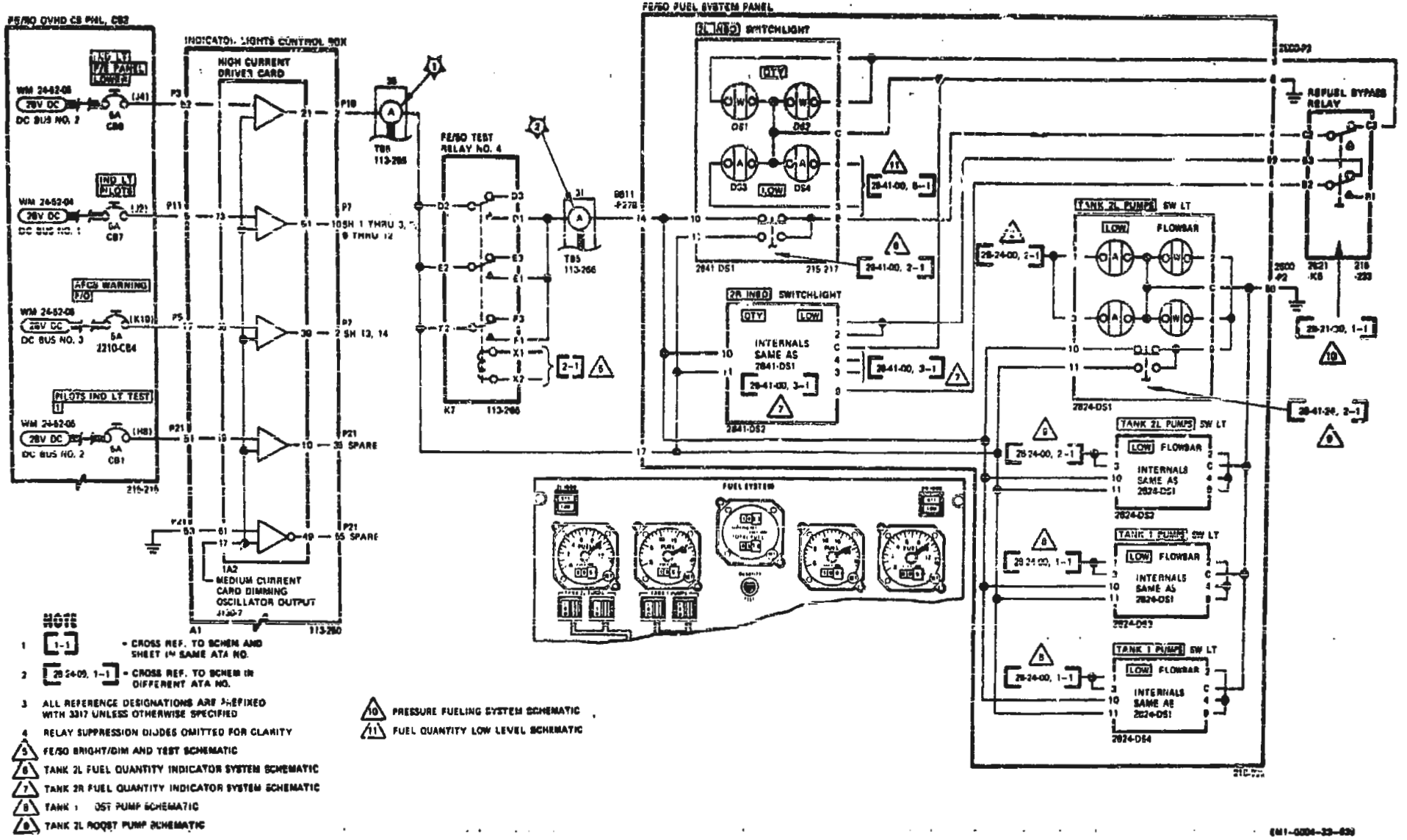
R EFFECTIVITY: 033-999
R
0078


INDICATOR LIGHTS CONTROL BOX
HIGH CURRENT DRIVER CARD
FE/BO TEST RELAY NO. 4
FUEL JETTISON PANEL
TANK 3 SWITCHLIGHT
TANK 3R SWITCHLIGHT
INTERNALS SAME AS 2831-057
DC BUS NO. 2
DC BUS NO. 1
DC BUS NO. 3
28V DC
5A
SPARE
MEDIUM CURRENT CARD DIMMING OSCILLATOR OUTPUT J120-7
1A2
NOTE
1 [1-1] • CROSS REF. TO SCHEM AND SHEET IN SAME ATA NO.
2 [28-31-00, 1-1] • CROSS REF. TO SCHEM IN DIFFERENT ATA NO.
3 ALL REFERENCE DESIGNATIONS ARE PREFIXED WITH 3317 UNLESS OTHERWISE SPECIFIED
4 FE/BO BRIGHT/DIM AND TEST SCHEMATIC
5 FUEL JETTISON SYSTEM SCHEMATIC

Indicator Bright/Dim and Test - Card 1A2 Schematic
SCHEM 6 (Sheet 16)


INDICATOR LIGHTS CONTROL BOX
HIGH CURRENT DRIVER CARD
FE/SO TEST RELAY NO. 4
FUEL JETTISON PANEL
TANK 1 SWITCHLIGHT
TANK 2R SWITCHLIGHT
INTERNALS SAME AS 2831-057
MEDIUM CURRENT CARD DIMMING OSCILLATOR OUTPUT J139-7
NOTE
1 [1-1] = CROSS REF. TO SCHEM AND SHEET IN SAME ATA NO.
2 [28-31-00, 1-1] = CROSS REF. TO SCHEM IN DIFFERENT ATA NO.
3 ALL REFERENCE DESIGNATIONS ARE PREFIXED WITH 2317 UNLESS OTHERWISE SPECIFIED
4 FE/SO BRIGHT/DIM AND TEST SCHEMATIC
5 FUEL JETTISON SYSTEM SCHEMATIC

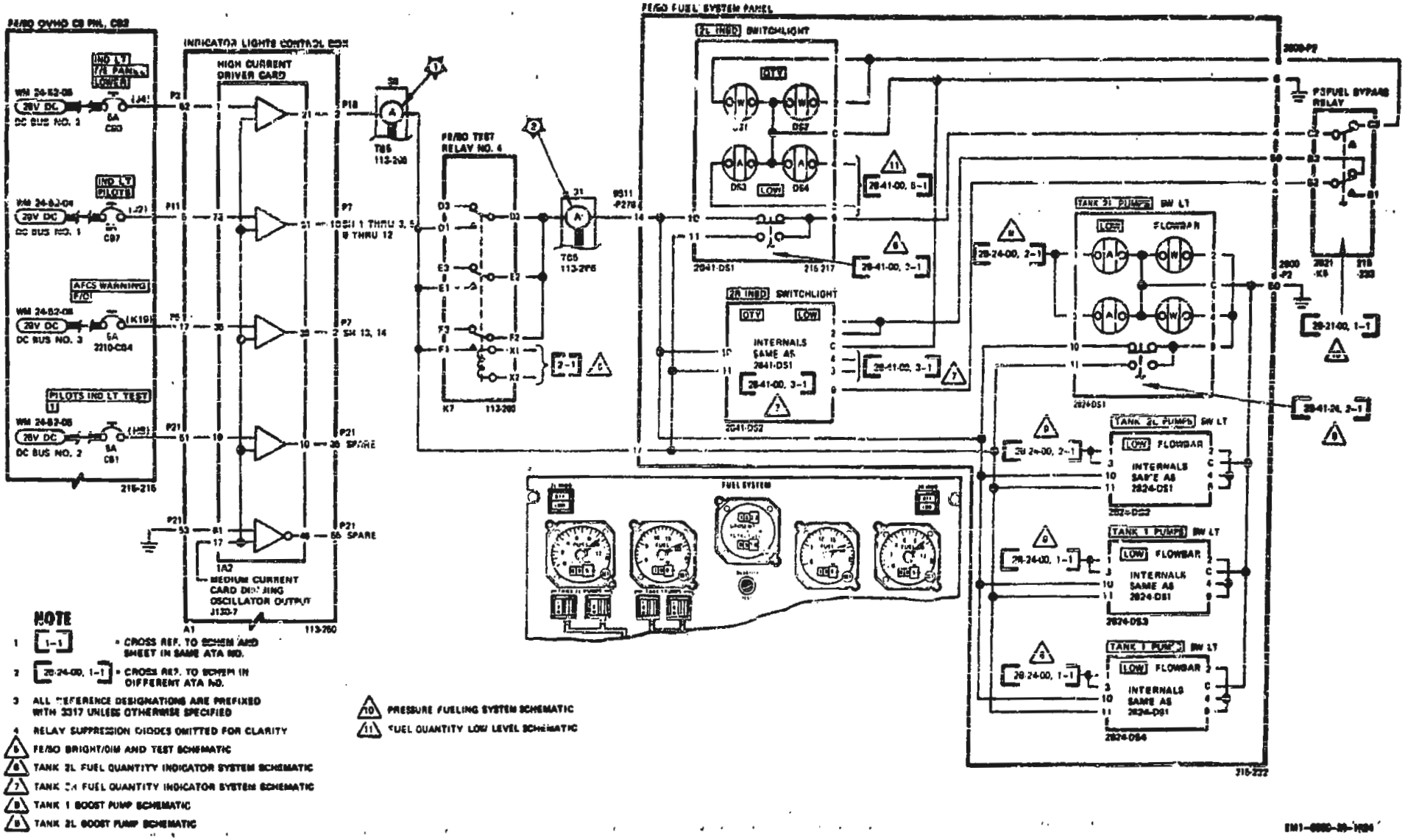
Indicator Bright/Dim and Test - Card 1A2 Schematic
SCHEM 6 (Sheet 16)



NOTES

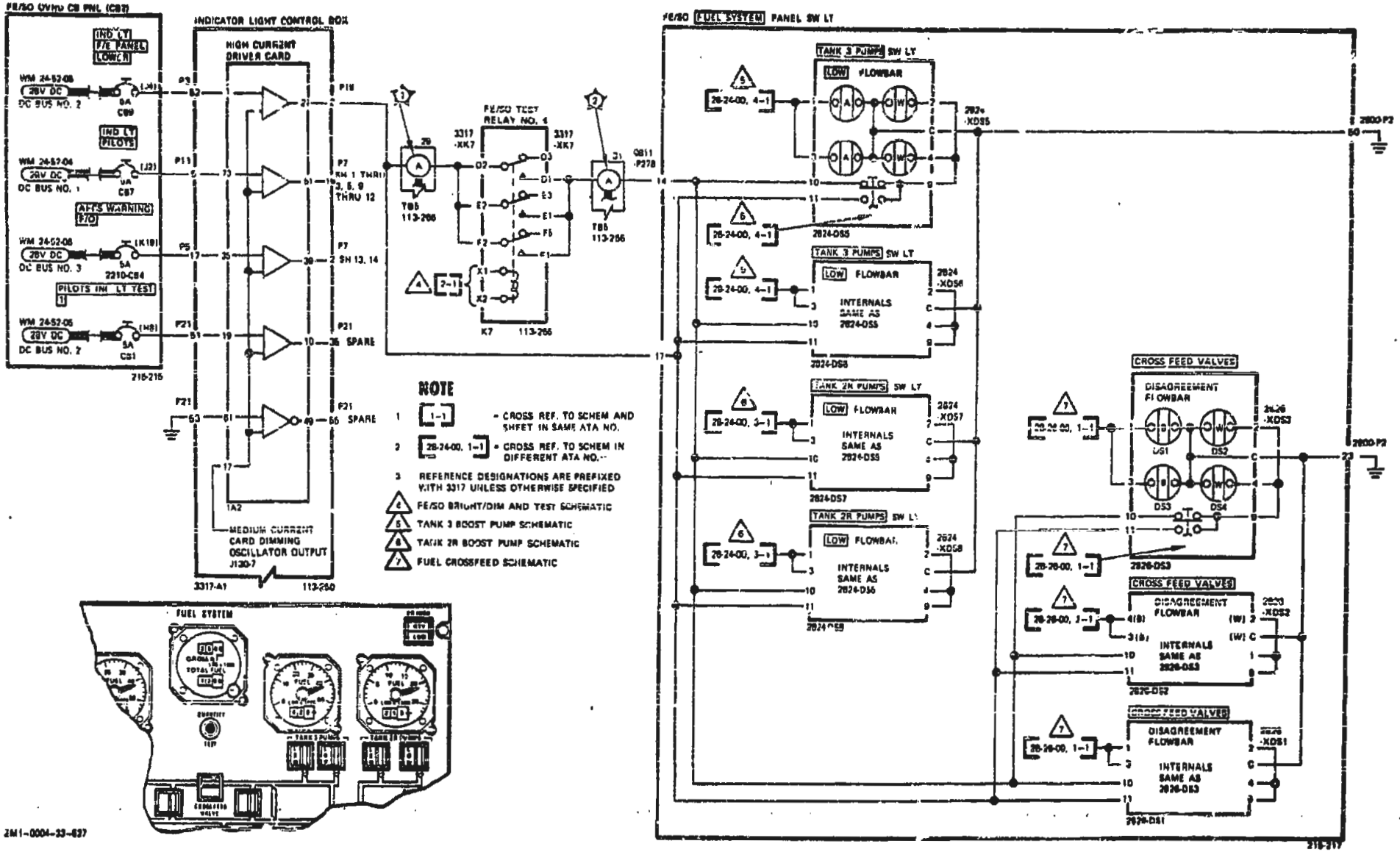
1. [1-1] - CROSS REF. TO SCHEM AND SHEET IN SAME ATA NO.
2. [28-24-00, 1-1] - CROSS REF. TO SCHEM IN DIFFERENT ATA NO.
3. ALL REFERENCE DESIGNATIONS ARE PREFIXED WITH 3317 UNLESS OTHERWISE SPECIFIED
4. RELAY SUPPRESSION DIODES OMITTED FOR CLARITY
5. FE/SO BRIGHT/DIM AND TEST SCHEMATIC
6. TANK 2L FUEL QUANTITY INDICATOR SYSTEM SCHEMATIC
7. TANK 2R FUEL QUANTITY INDICATOR SYSTEM SCHEMATIC
8. TANK 1 DST PUMP SCHEMATIC
9. TANK 2L BOOST PUMP SCHEMATIC
10. PRESSURE FUELING SYSTEM SCHEMATIC
11. FUEL QUANTITY LOW LEVEL SCHEMATIC

Indicator Bright/Dim and Test - Card 1A2 Schematic
SCHEM 6 (Sheet 17)

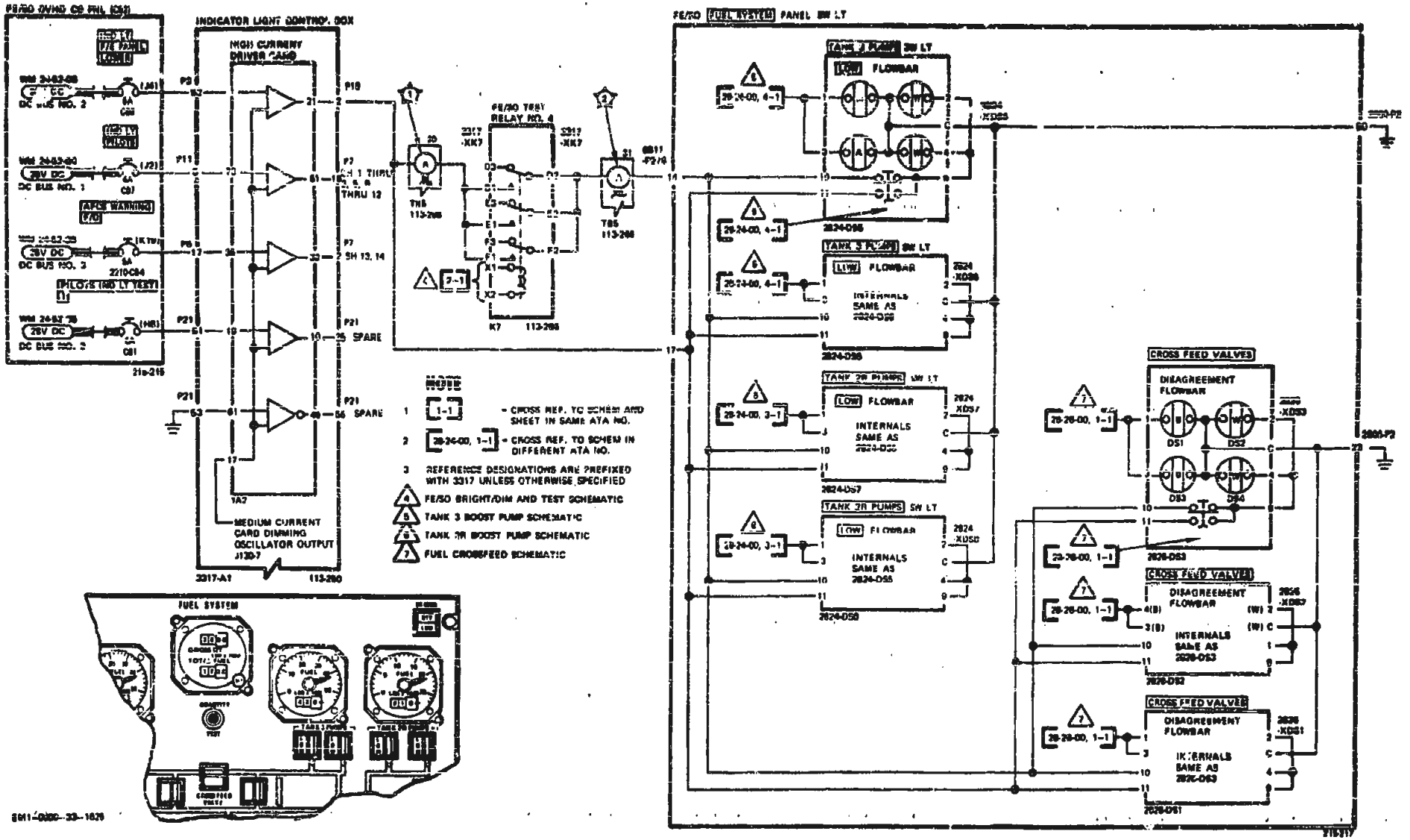

FE/EO OVHD CB PNL, CB2
INDICATOR LIGHTS CONTROL BOX
HIGH CURRENT DRIVER CARD
FE/EO TEST RELAY NO. 4
FE/EO FUEL SYSTEM PANEL
2L (IND) SWITCHLIGHT
2R (IND) SWITCHLIGHT
INTERNALS SAME AS 2841-DS1
FUEL SYSTEM
TANK 2L PUMP SW LT
TANK 1 PUMP SW LT
FLOWBAR
LOW
28 VDC
AFCS WARNING F/O
PILOTS IND LT TEST
MEDIUM CURRENT CARD DIMMING OSCILLATOR OUTPUT J133-7
NOTE
1 CROSS REF. TO SCHEM AND SHEET IN SAME ATA NO.
2 CROSS REF. TO SCHEM IN DIFFERENT ATA NO.
3 ALL REFERENCE DESIGNATIONS ARE PREFIXED WITH 3317 UNLESS OTHERWISE SPECIFIED
4 RELAY SUPPRESSION DIODES OMITTED FOR CLARITY
5 FE/EO BRIGHT/DIM AND TEST SCHEMATIC
6 TANK 2L FUEL QUANTITY INDICATOR SYSTEM SCHEMATIC
7 TANK 1 FUEL QUANTITY INDICATOR SYSTEM SCHEMATIC
8 TANK 1 BOOST PUMP SCHEMATIC
9 TANK 2L BOOST PUMP SCHEMATIC
10 PRESSURE FUELING SYSTEM SCHEMATIC
11 FUEL QUANTITY LOW LEVEL SCHEMATIC

Indicator Bright/Dim and Test - Card 1A2 Schematic
SCHEM 6 (Sheet 17)

R EFFECTIVITY: 033-999
R
007B

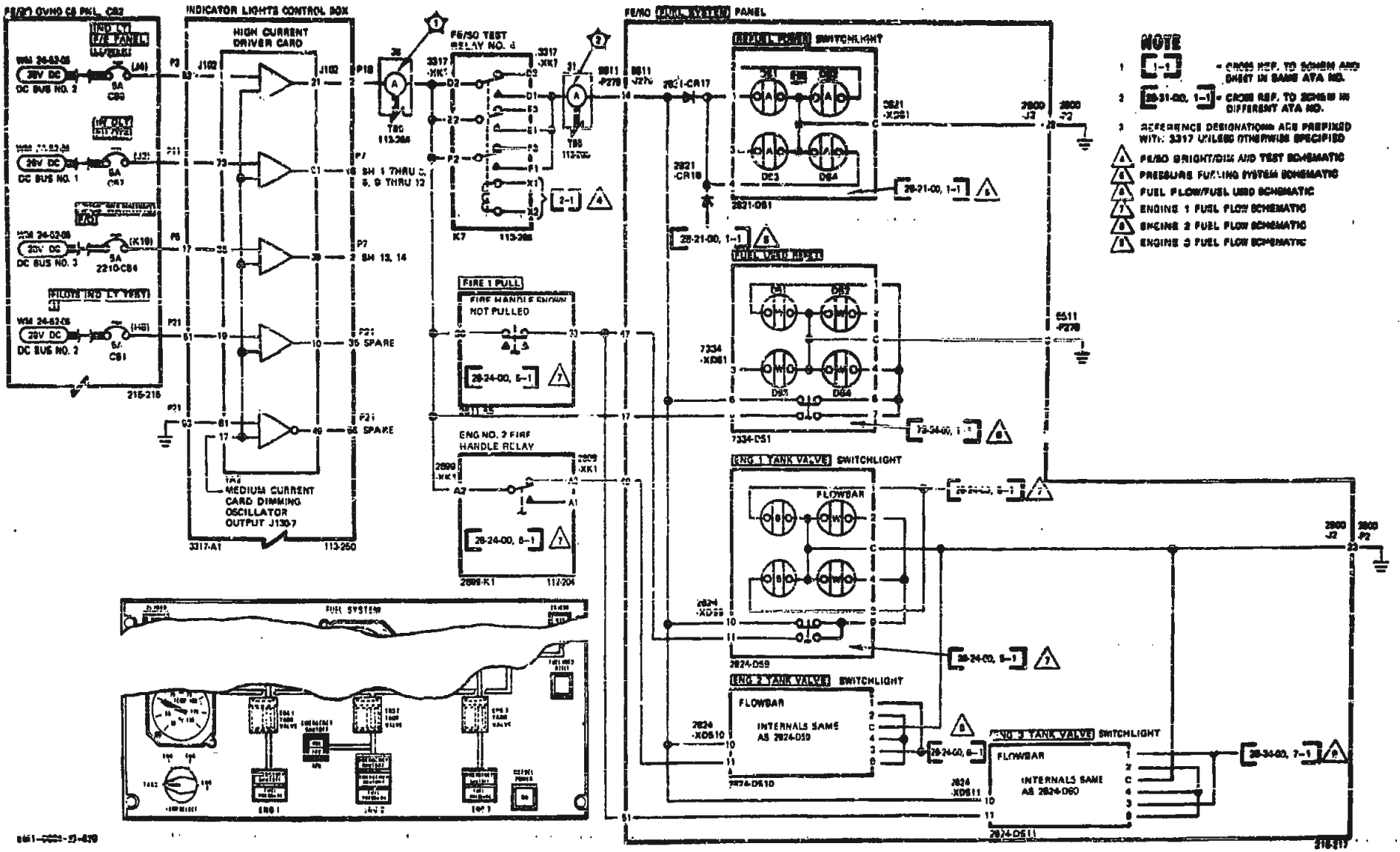


Indicator Bright/Dim and Test - Card 1A2 Schematic
SCHEM 6 (Sheet 18)


INDICATOR LIGHT CONTRL. BOX
HIGH CURRENT DRIVER CARD
MEDIUM CURRENT CARD DIMMING OSCILLATOR OUTPUT J120-7
1A2
3317-A1
113-280
FE/SO TEST RELAY NO. 4
K7 113-286
FE/SO FUEL SYSTEM PANEL SW LT
TANK 2 PUMPS SW LT
TANK 3 PUMPS SW LT
TANK 3R PUMPS SW LT
LOW FLOWBAR
INTERNALS SAME AS 2824-D56
INTERNALS SAME AS 2824-D57
INTERNALS SAME AS 2824-D58
CROSS FEED VALVES
DISAGREEMENT FLOWBAR
INTERNALS SAME AS 2826-D53
DS1
DS2
DS3
DS4
MODES
1 [1-1] - CROSS REF. TO SCHEM AND SHEET IN SAME ATA NO.
2 [28-24-00, 1-1] - CROSS REF. TO SCHEM IN DIFFERENT ATA NO.
3 REFERENCE DESIGNATIONS ARE PREFIXED WITH 3317 UNLESS OTHERWISE SPECIFIED
4 FE/SO BRIGHT/DIM AND TEST SCHEMATIC
5 TANK 3 BOOST PUMP SCHEMATIC
6 TANK 3R BOOST PUMP SCHEMATIC
7 FUEL CROSSFEED SCHEMATIC
FUEL SYSTEM

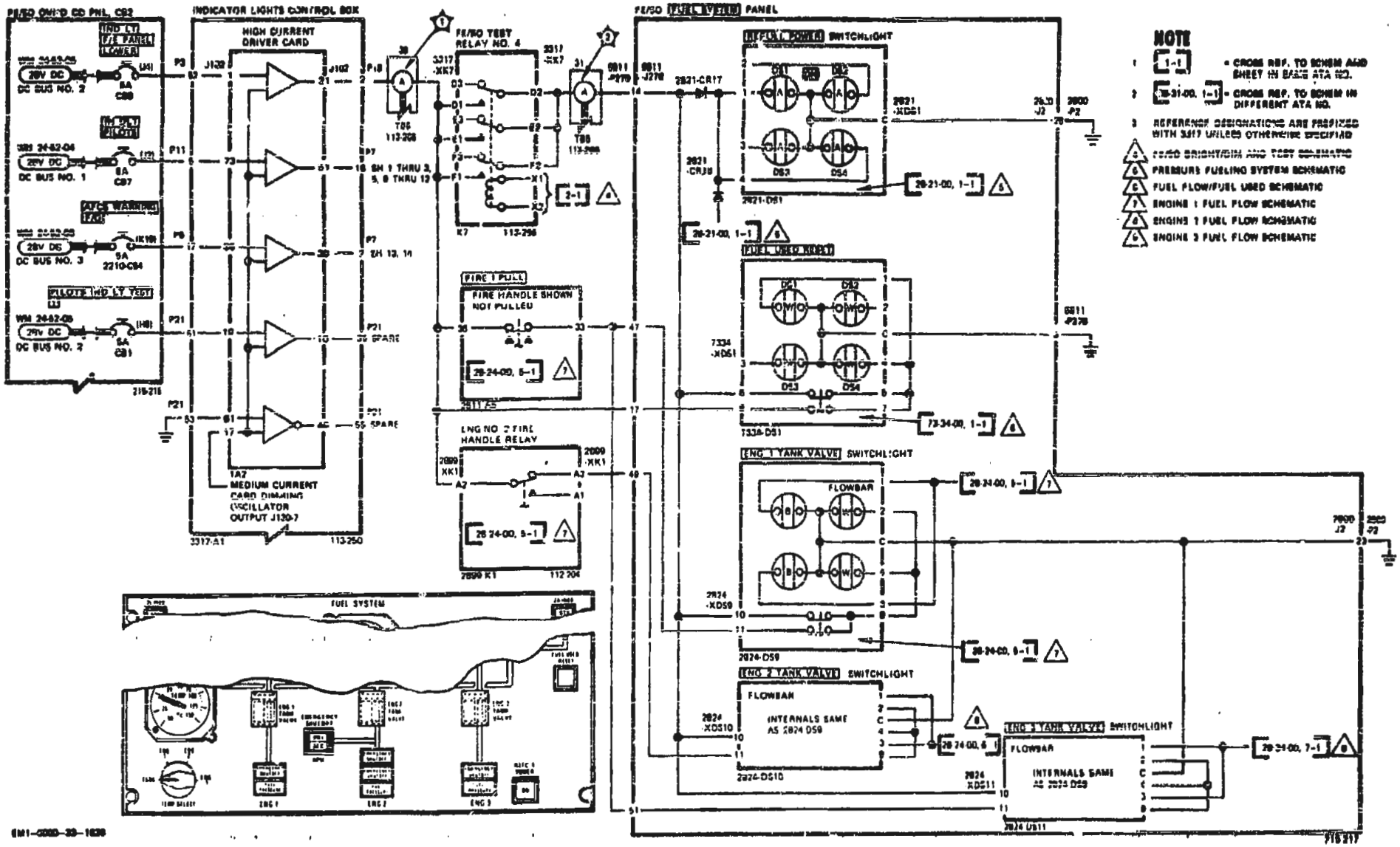
Indicator Bright/Dim and Test - Card 1A2 Schematic
SCHEM 6 (Sheet 18)

R EFFECTIVITY: 033-999
R
0078


INDICATOR LIGHTS CONTROL BOX
HIGH CURRENT DRIVER CARD
MEDIUM CURRENT CARD DIMMING OSCILLATOR OUTPUT J130-7
FE/SO TEST RELAY NO. 6
ENG NO. 2 FIRE HANDLE RELAY
FIRE T PULL
FIRE HANDLE SHOWN NOT PULLED
FE/SO FUEL SYSTEM PANEL
ENG 1 TANK VALVE SWITCHLIGHT
ENG 2 TANK VALVE SWITCHLIGHT
ENG 3 TANK VALVE SWITCHLIGHT
FLOWBAR
INTERNALS SAME AS 2824-D59
INTERNALS SAME AS 2824-D60
NOTE
1 1-1 = CROSS REF. TO SCHEM AND SHEET IN SAME ATA NO.
2 28-31-00, 1-1 = CROSS REF. TO SCHEM IN DIFFERENT ATA NO.
3 REFERENCE DESIGNATIONS ARE PREFIXED WITH 3317 UNLESS OTHERWISE SPECIFIED
A FE/SO BRIGHT/DIM AND TEST SCHEMATIC
B PRESSURE FUELING SYSTEM SCHEMATIC
C FUEL FLOW/FUEL USED SCHEMATIC
D ENGINE 1 FUEL FLOW SCHEMATIC
E ENGINE 2 FUEL FLOW SCHEMATIC
F ENGINE 3 FUEL FLOW SCHEMATIC

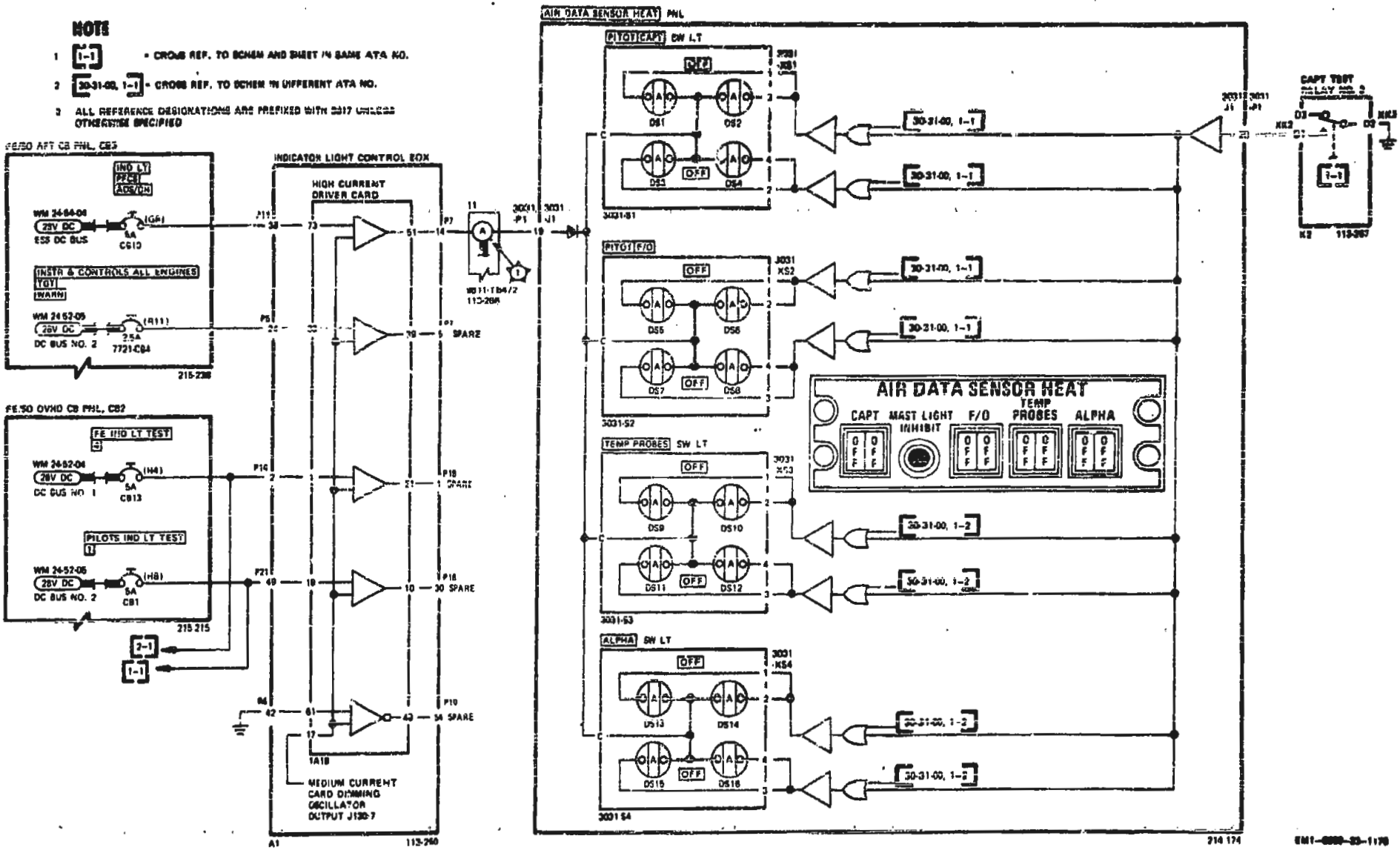
Indicator Bright/Dim and Test - Card 1A2 Schematic
SCHEM 6 (Sheet 19)

R EFFECTIVITY: 001-032
R
0078


INDICATOR LIGHTS CONTROL BOX
HIGH CURRENT DRIVER CARD
FE/SO TEST RELAY NO. 4
FE/SO FUEL SYSTEM PANEL
ENG NO 2 FIRE HANDLE RELAY
FIRE HANDLE SHOWN NOT PULLED
ENG 1 FUEL VALVE SWITCHLIGHT
ENG 2 FUEL VALVE SWITCHLIGHT
ENG 3 FUEL VALVE SWITCHLIGHT
FUEL SYSTEM
FLOWBAR
INTERNALS SAME AS 2824 DS9
NOTE
1 1-1 = CROSS REF. TO SCHEM AND SHEET IN BASIC ATA NO.
2 28-31-00, 1-1 = CROSS REF. TO SCHEM IN DIFFERENT ATA NO.
3 REFERENCE DESIGNATIONS ARE PREFIXED WITH 3317 UNLESS OTHERWISE SPECIFIED
A FE/SO BRIGHT/DIM AND TEST SCHEMATIC
B PRESSURE FUELING SYSTEM SCHEMATIC
C FUEL FLOW/FUEL USED SCHEMATIC
D ENGINE 1 FUEL FLOW SCHEMATIC
E ENGINE 2 FUEL FLOW SCHEMATIC
F ENGINE 3 FUEL FLOW SCHEMATIC

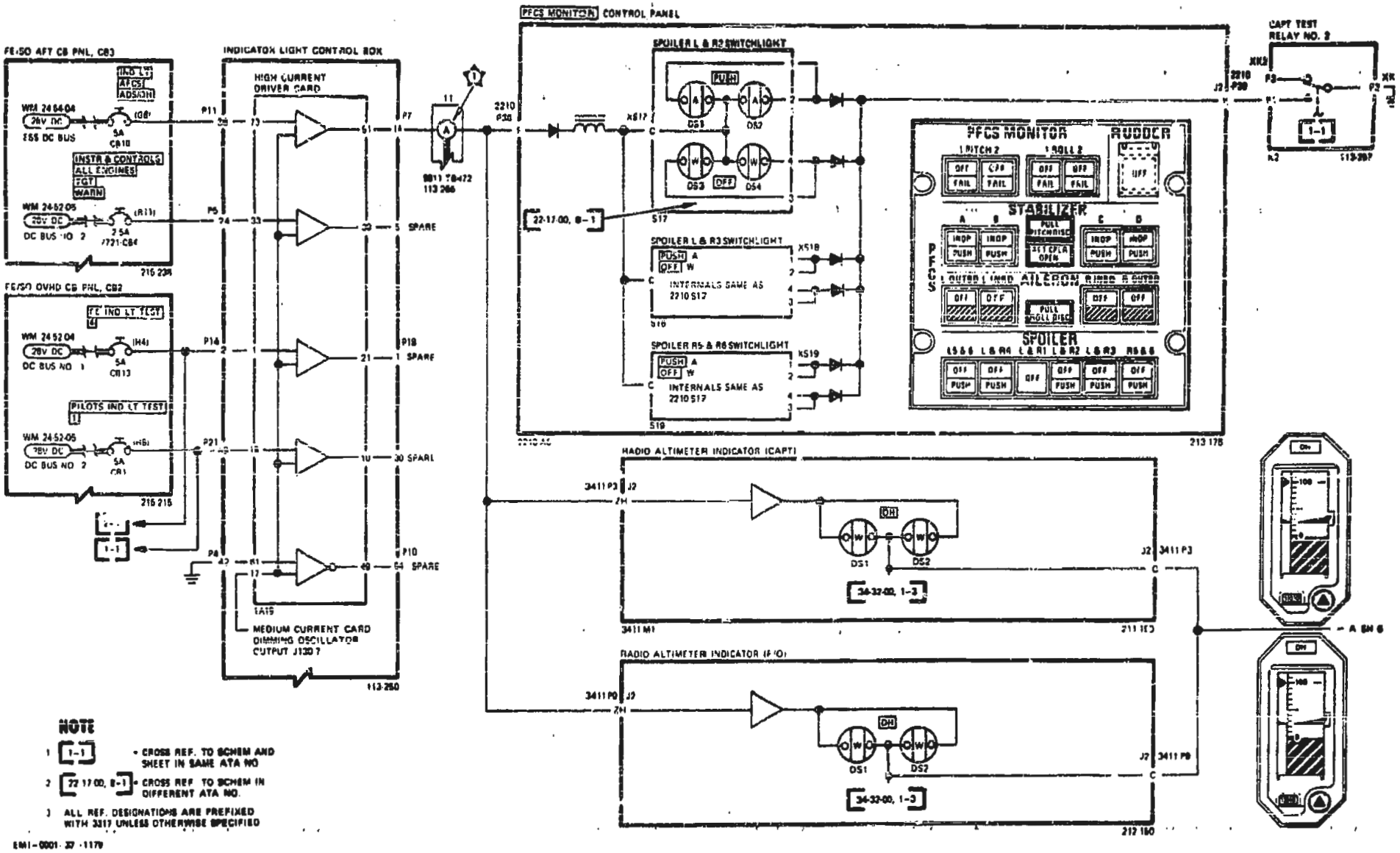
Indicator Bright/Dim and Test - Card 1A2 Schematic
SCHEM 6 (Sheet 19)

R EFFECTIVITY: 033-999
R
007B

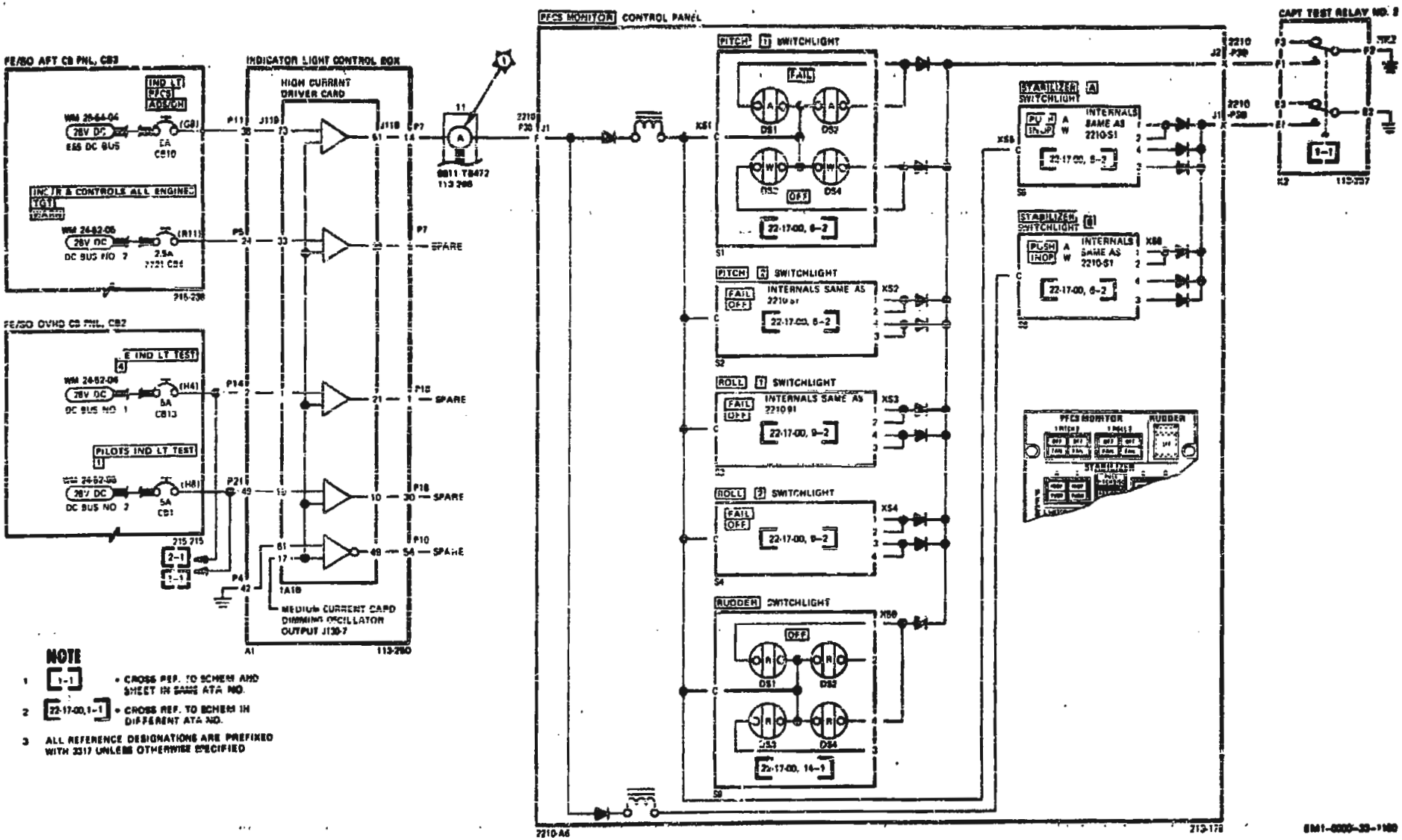


Indicator Bright/Dim and Test - Card 1A19 Schematic
SCHEM 7 (Sheet 1)

R
R
007B EFFECTIVITY: ALL

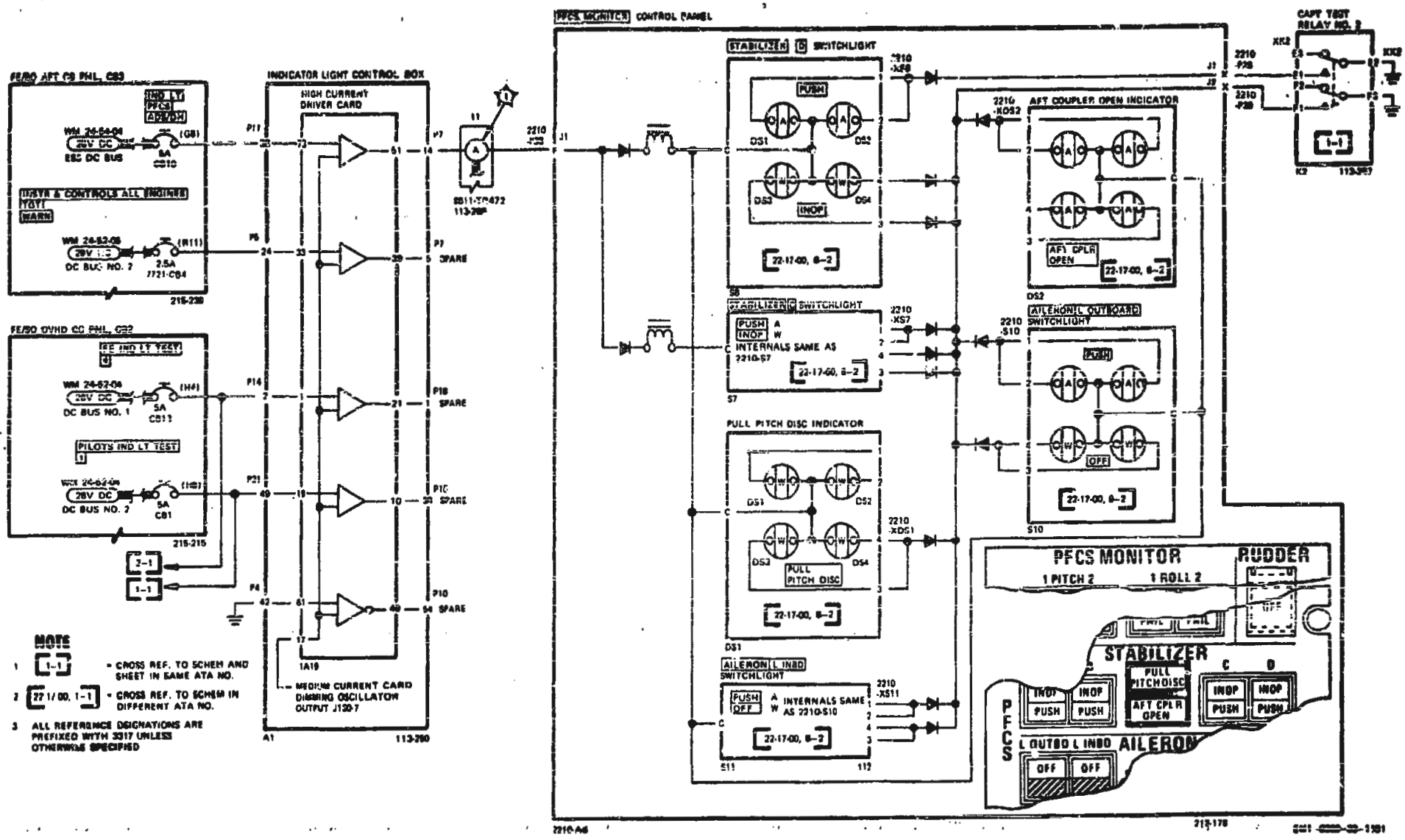

FE/SO AFT CB PNL, CB3
INDICATOR LIGHT CONTROL BOX
HIGH CURRENT DRIVER CARD
PFCS MONITOR CONTROL PANEL
SPOILER L & R3 SWITCHLIGHT
SPOILER L & R3 SWITCHLIGHT
SPOILER R5 & R6 SWITCHLIGHT
INTERNALS SAME AS 2210S17
PFCS MONITOR
RUDDER
STABILIZER
AILERON
SPOILER
CAPT TEST RELAY NO. 2
FE/SO OVHD CB PNL, CB2
MEDIUM CURRENT CARD DIMMING OSCILLATOR OUTPUT J1307
RADIO ALTIMETER INDICATOR (CAPT)
RADIO ALTIMETER INDICATOR (F/O)
NOTE
1 [1-1] - CROSS REF. TO SCHEM AND SHEET IN SAME ATA NO
2 [22-17-00, 8-1] - CROSS REF. TO SCHEM IN DIFFERENT ATA NO.
3 ALL REF. DESIGNATIONS ARE PREFIXED WITH 3317 UNLESS OTHERWISE SPECIFIED

Indicator Bright/Dim and Test - Card 1A19 Schematic
SCHEM 7 (Sheet 2)


FE/SO AFT CB PNL, CB3
INDICATOR LIGHT CONTROL BOX
HIGH CURRENT DRIVER CARD
PFCS MONITOR CONTROL PANEL
CAPT TEST RELAY NO. 2
FE/SO OVHD CB PNL, CB2
MEDIUM CURRENT CARD DIMMING OSCILLATOR OUTPUT J130-7
PITCH 1 SWITCHLIGHT
PITCH 2 SWITCHLIGHT
ROLL 1 SWITCHLIGHT
ROLL 2 SWITCHLIGHT
RUDDER SWITCHLIGHT
STABILIZER A SWITCHLIGHT
STABILIZER B SWITCHLIGHT
PFCS MONITOR RUDDER
SPARE
NOTE
1 CROSS REF. TO SCHEM AND SHEET IN SAME ATA NO.
2 CROSS REF. TO SCHEM IN DIFFERENT ATA NO.
3 ALL REFERENCE DESIGNATIONS ARE PREFIXED WITH 2317 UNLESS OTHERWISE SPECIFIED

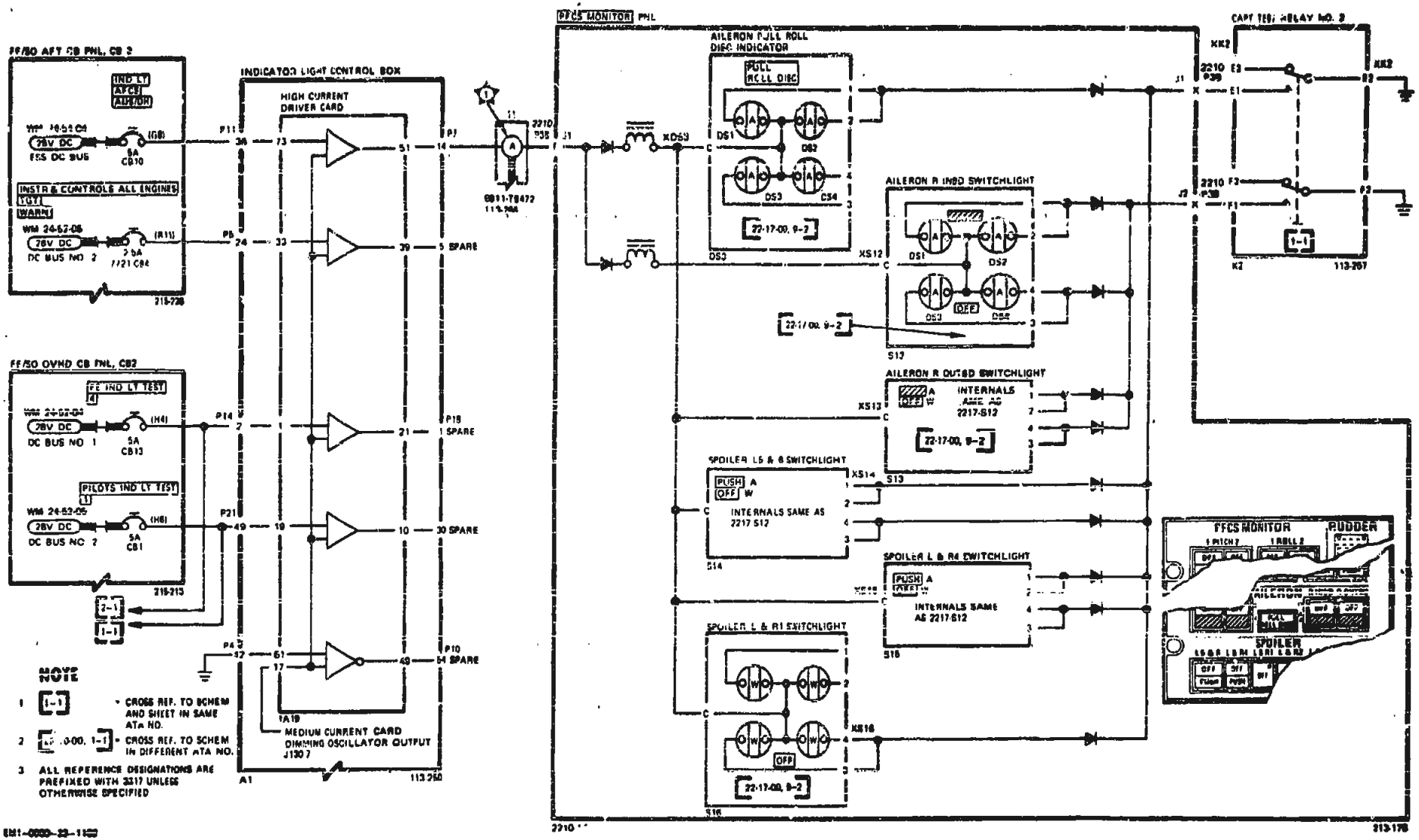
Indicator Bright/Dim and Test - Card 1A19 Schematic
SCHEM 7 (Sheet 3)

R
R
007B EFFECTIVITY: ALL


PFCS MONITOR CONTROL PANEL
INDICATOR LIGHT CONTROL BOX
HIGH CURRENT DRIVER CARD
MEDIUM CURRENT CARD DIMMING OSCILLATOR OUTPUT J130-7
STABILIZER D SWITCHLIGHT
AFT COUPLER OPEN INDICATOR
AILERON L OUTBOARD SWITCHLIGHT
PULL PITCH DISC INDICATOR
AILERON L INBD SWITCHLIGHT
CAPT TEST RELAY NO. 2
PFCS MONITOR
1 PITCH 2
1 ROLL 2
RUDDER
STABILIZER
AILERON
PFCS
NOTE
1 [1-1] - CROSS REF. TO SCHEM AND SHEET IN SAME ATA NO.
2 [27-17-00, 1-1] - CROSS REF. TO SCHEM IN DIFFERENT ATA NO.
3 ALL REFERENCE DSIGNATIONS ARE PREFIXED WITH 3317 UNLESS OTHERWISE SPECIFIED

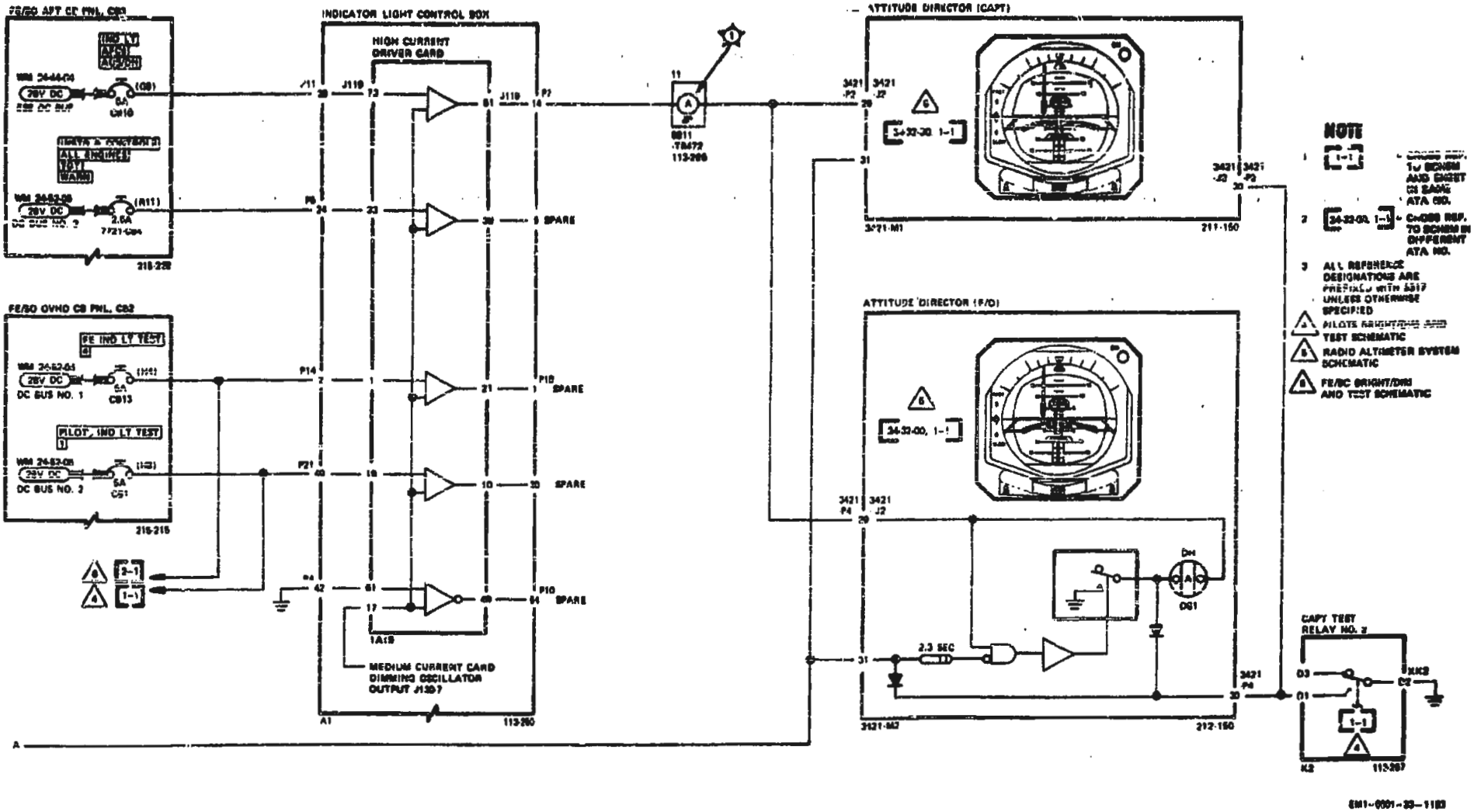
Indicator Bright/Dim and Test - Card 1A19 Schematic
SCHEM 7 (Sheet 4)

R
R
0078 EFFECTIVITY: ALL

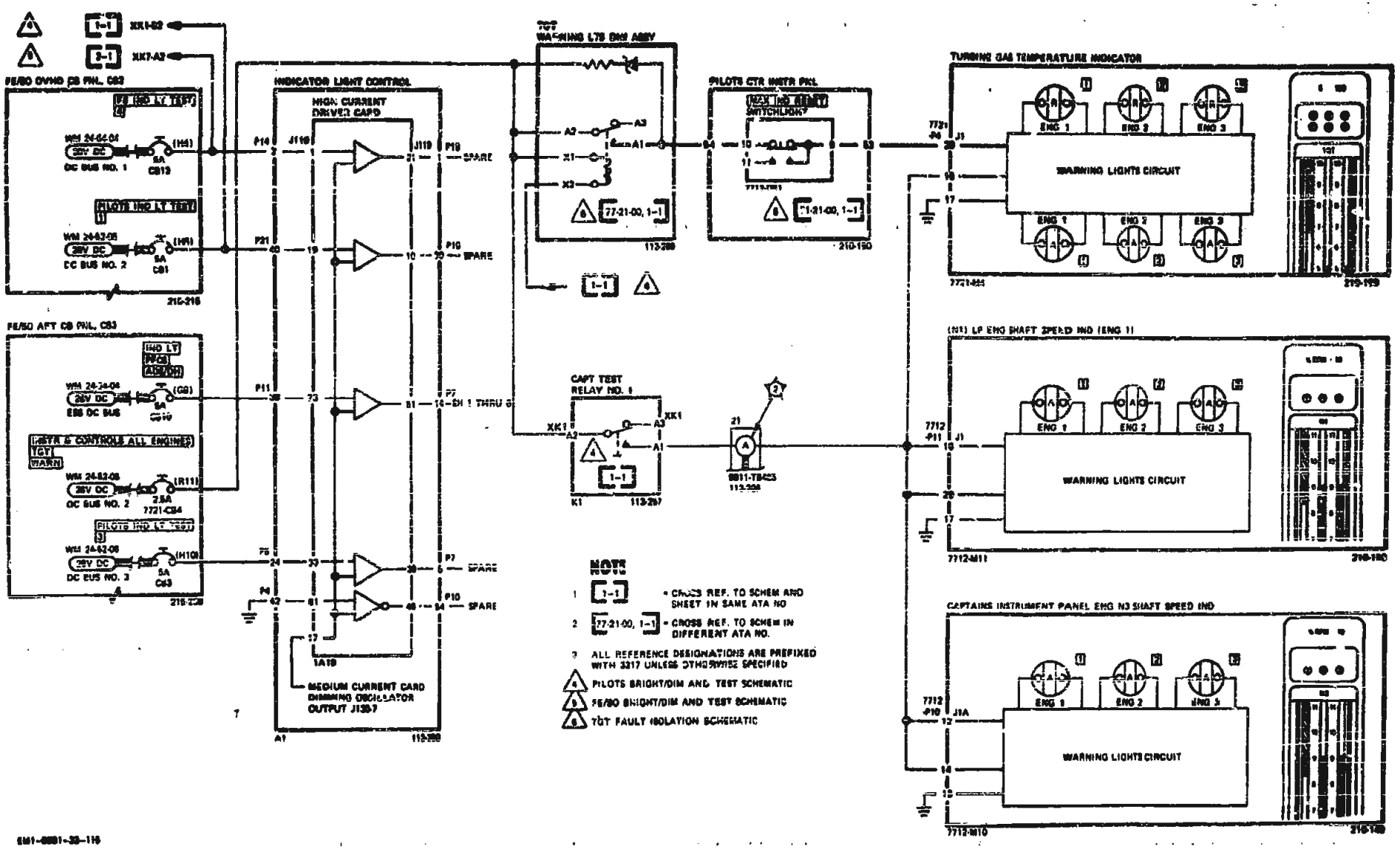

FFCS MONITOR PNL
INDICATOR LIGHT CONTROL BOX
HIGH CURRENT DRIVER CARD
AILERON FULL ROLL DISC INDICATOR
AILERON R INBD SWITCHLIGHT
AILERON R OUTBD SWITCHLIGHT
SPOILER L5 & 6 SWITCHLIGHT
SPOILER L & R4 SWITCHLIGHT
SPOILER L & R1 SWITCHLIGHT
CAPT TEST RELAY NO. 2
FFCS MONITOR
RUDDER
SPOILER
28V DC
ESS DC BUS
DC BUS NO 1
DC BUS NO 2
MEDIUM CURRENT CARD DIMMING OSCILLATOR OUTPUT J1307
NOTE
1 [1-1] CROSS REF. TO SCHEM AND SHEET IN SAME ATA NO.
2 [ ] CROSS REF. TO SCHEM IN DIFFERENT ATA NO.
3 ALL REFERENCE DESIGNATIONS ARE PREFIXED WITH 3317 UNLESS OTHERWISE SPECIFIED

Indicator Bright/Dim and Test - Card 1A19 Schematic
SCHEM 7 (Sheet 5)

R EFFECTIVITY: ALL
R
007B

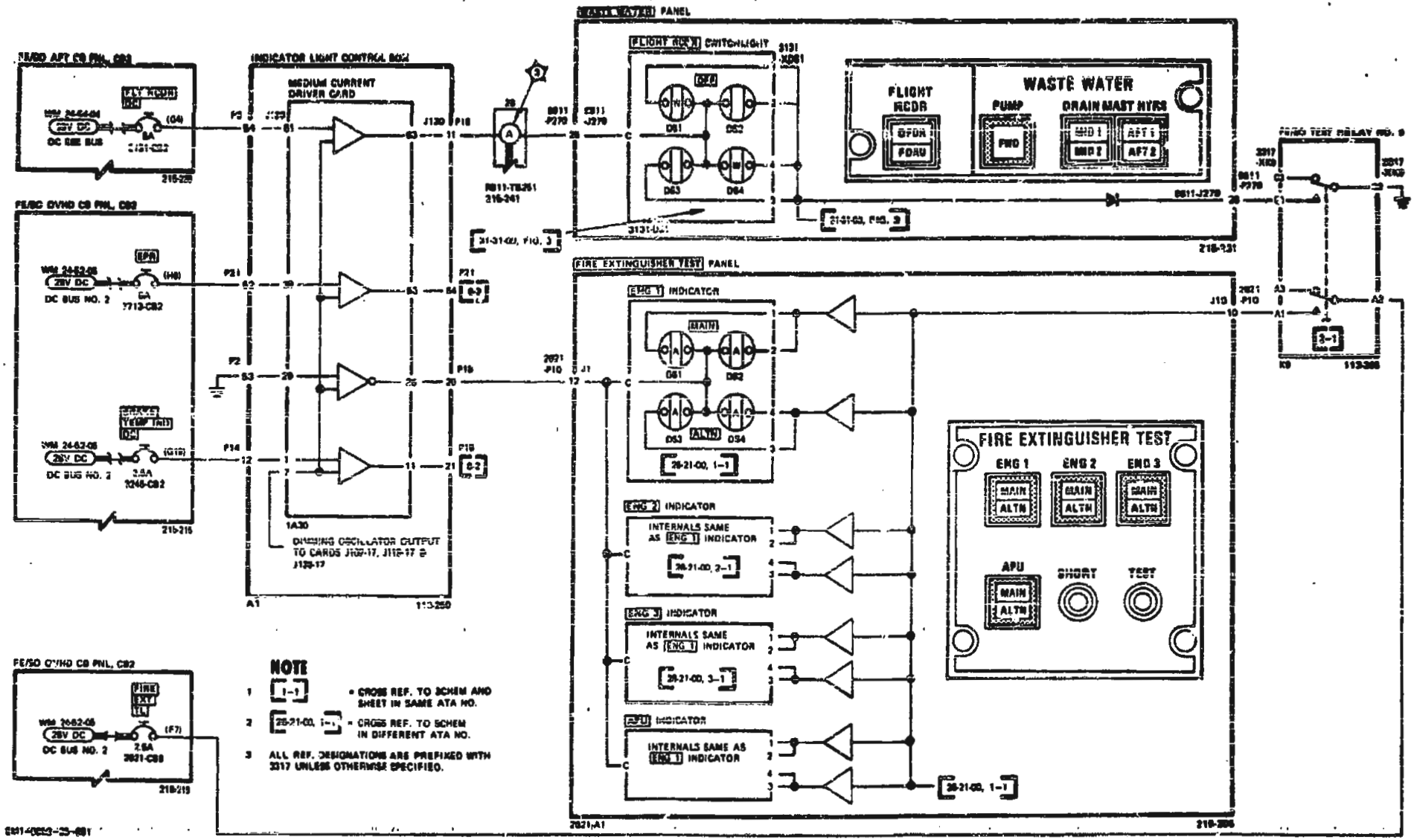


Indicator Bright/Dim and Test - Card 1A19 Schematic
SCHEM 7 (Sheet 6)


INDICATOR LIGHT CONTROL
HIGH CURRENT DRIVER CARD
MEDIUM CURRENT CARD DIMMING OSCILLATOR OUTPUT J13B7
1A19
TURBINE GAS TEMPERATURE INDICATOR
WARNING LIGHTS CIRCUIT
CAPT TEST RELAY NO. 1
CAPTAINS INSTRUMENT PANEL ENG N3 SHAFT SPEED IND
NOTE
1 1-1 • CROSS REF. TO SCHEM AND SHEET IN SAME ATA NO
2 27-21-00, 1-1 • CROSS REF. TO SCHEM IN DIFFERENT ATA NO.
3 ALL REFERENCE DESIGNATIONS ARE PREFIXED WITH 3217 UNLESS OTHERWISE SPECIFIED
4 PILOTS BRIGHT/DIM AND TEST SCHEMATIC
5 FE/SO BRIGHT/DIM AND TEST SCHEMATIC
6 TGT FAULT ISOLATION SCHEMATIC

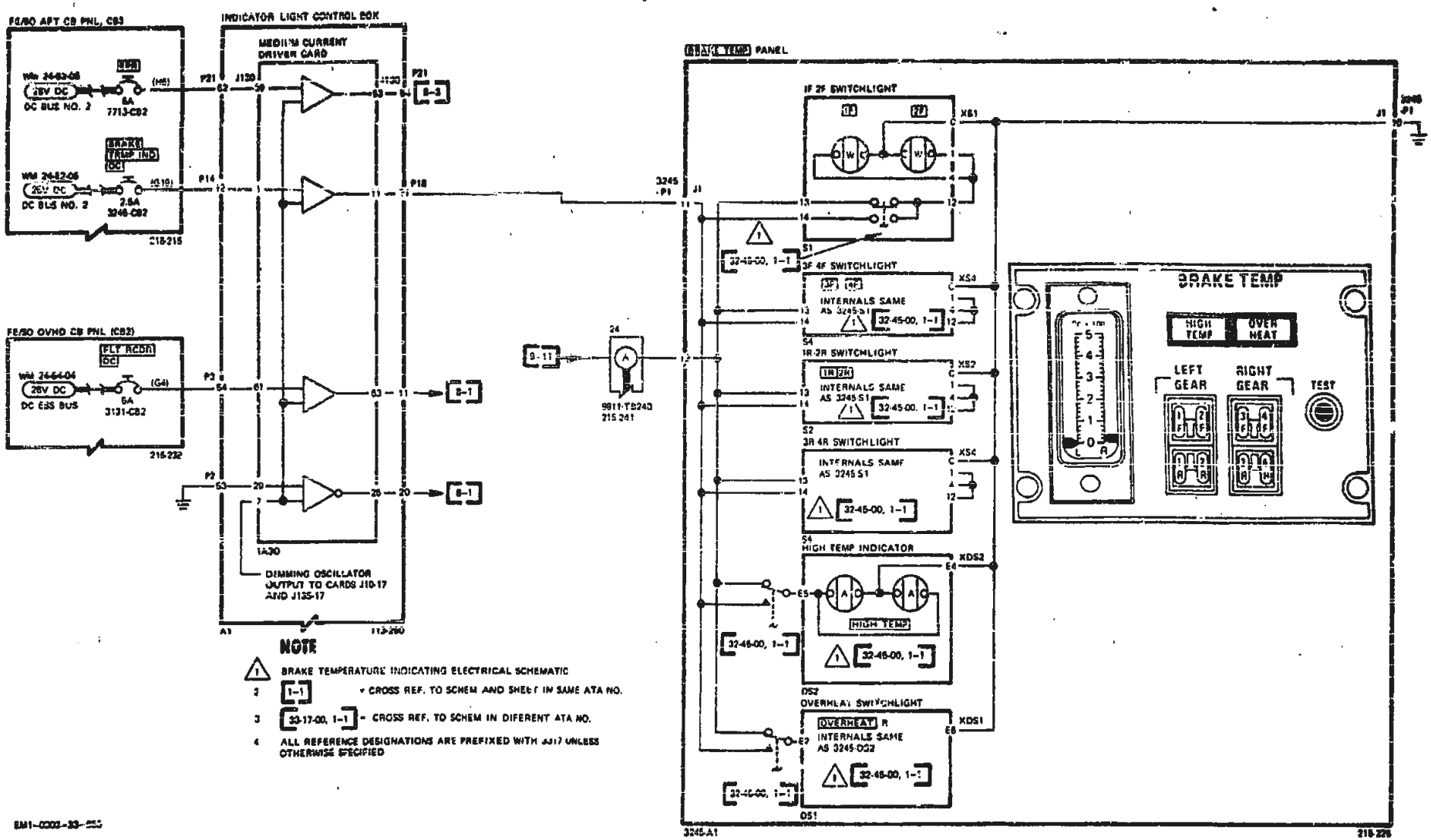
Indicator Bright/Dim and Test - Card 1A19 Schematic
SCHEM 7 (Sheet 7)

R EFFECTIVITY: ALL
R
007B



Indicator Bright/Dim and Test - Card 1A30 Schematic
SCHEM 8 (Sheet 1)

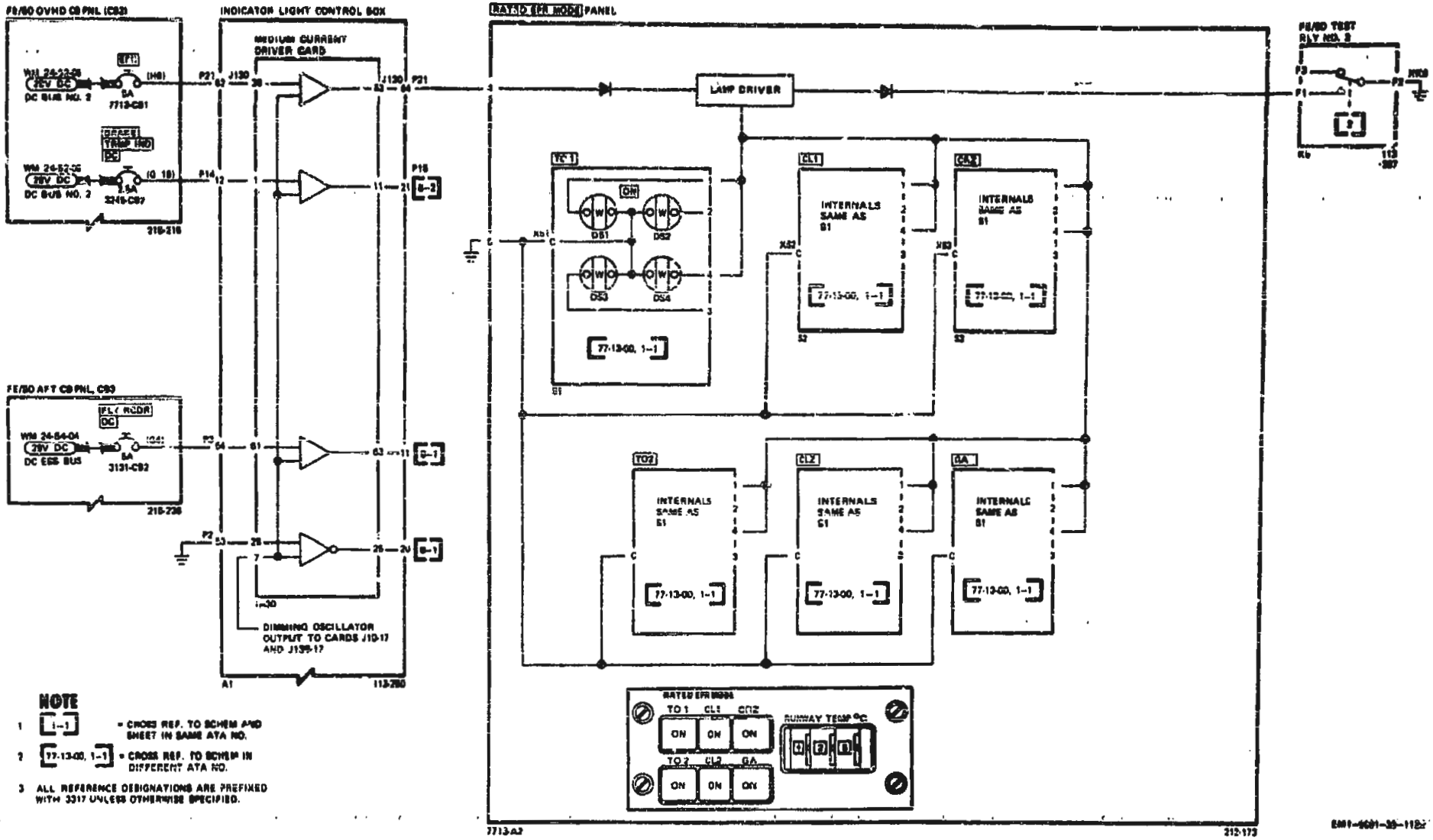
R EFFECTIVITY: ALL
R
0078



R Indicator Bright/Dim and Test - Card 1A30 Schematic
R SCHEM 8 (Sheet 2)

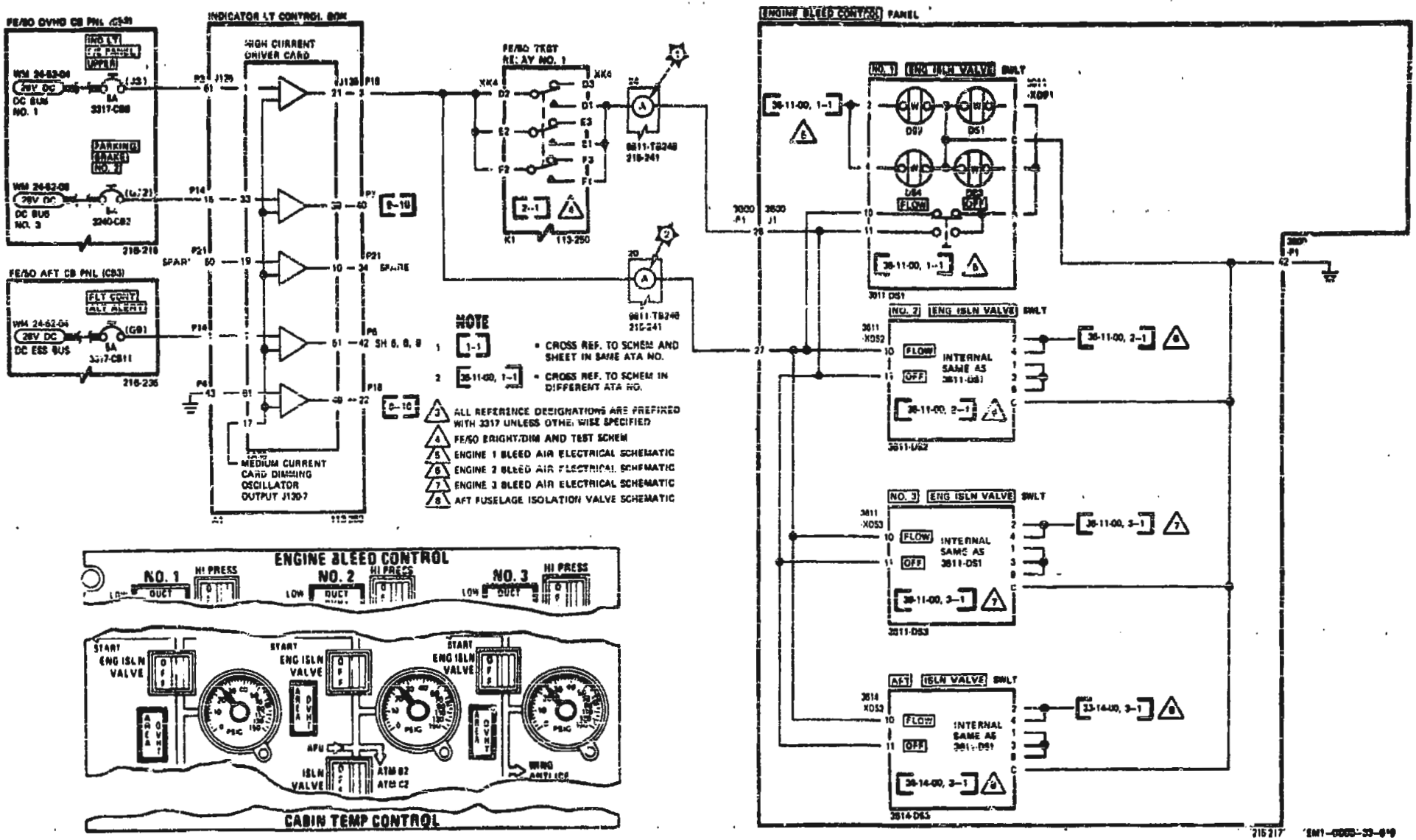
EFFECTIVITY: ALL

007B

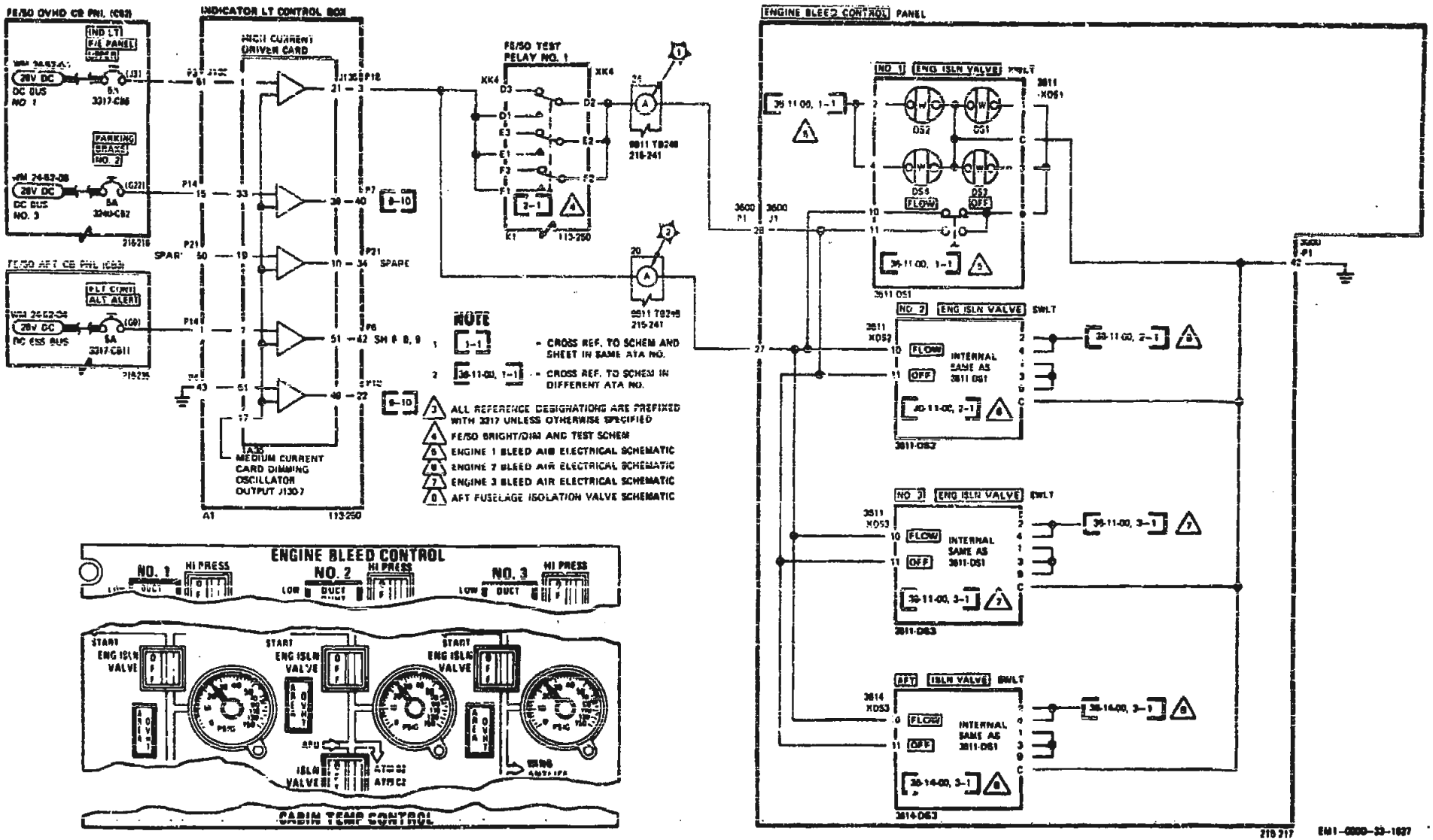

FE/EO OVHD CB PNL (CB2)
INDICATOR LIGHT CONTROL BOX
MEDIUM CURRENT DRIVER CARD
RATED EPR MODE PANEL
LAMP DRIVER
FE/EO TEST R'LY NO. 2
FE/EO AFT CB PNL, CB3
DIMMING OSCILLATOR OUTPUT TO CARDS J10-17 AND J135-17
INTERNALS SAME AS S1
RUNWAY TEMP °C
TO 1
CL1
CL2
TO 2
GA
ON
NOTE
1 [1-1] = CROSS REF. TO SCHEM AND SHEET IN SAME ATA NO.
2 [77-13-00, 1-1] = CROSS REF. TO SCHEM IN DIFFERENT ATA NO.
3 ALL REFERENCE DESIGNATIONS ARE PREFIXED WITH 3317 UNLESS OTHERWISE SPECIFIED.

Indicator Bright/Dim and Test - Card 1A30 Schematic
SCHEM 8 (Sheet 3)

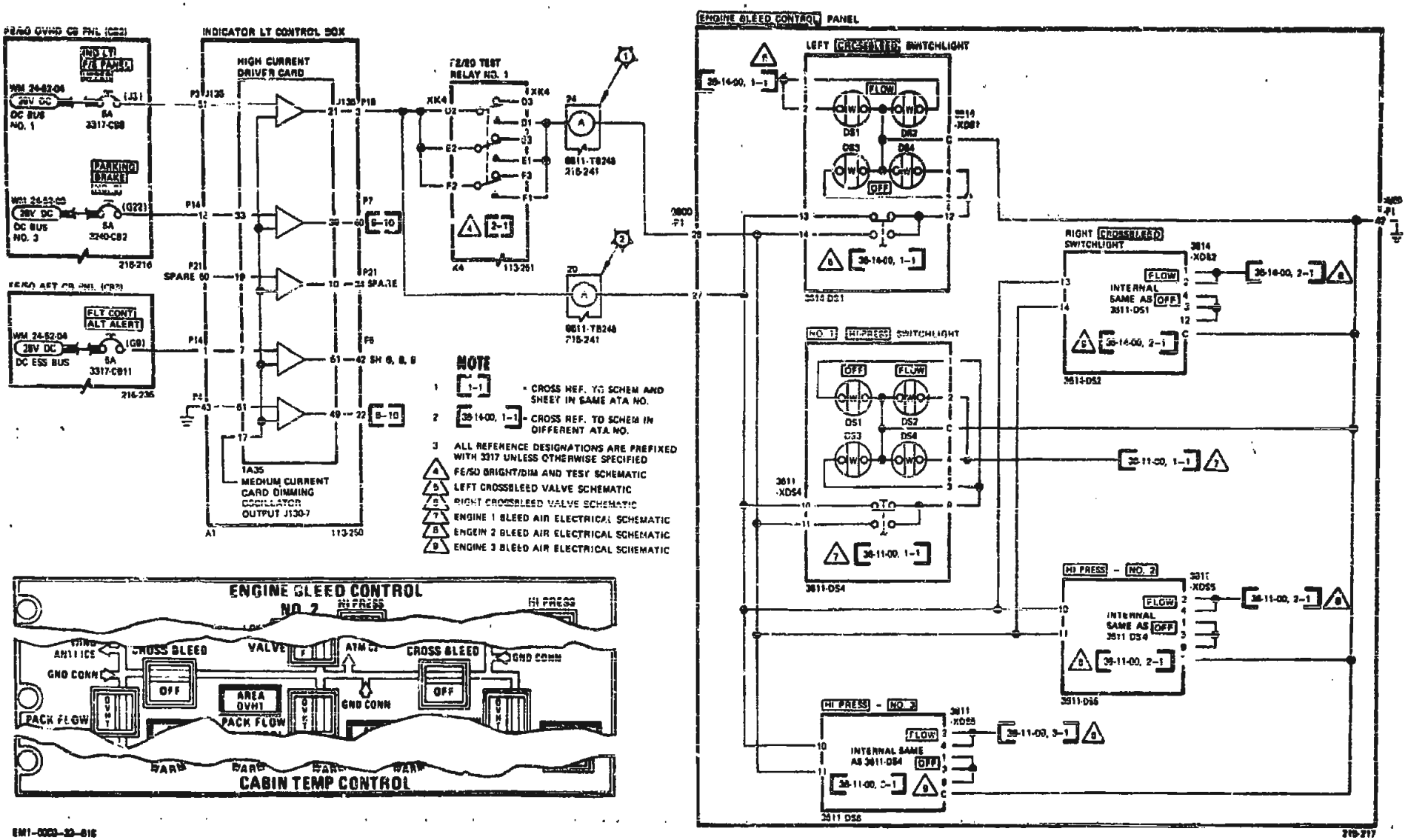
R EFFECTIVITY: ALL
R
0078


INDICATOR LT CONTROL BOX
HIGH CURRENT DRIVER CARD
MEDIUM CURRENT CARD DIMMING OSCILLATOR OUTPUT J130-7
FE/SO TEST RELAY NO. 1
FE/SO OVHD CB PNL (C3-5)
FE/SO AFT CB PNL (CB3)
ENGINE BLEED CONTROL PANEL
NO. 1 ENG ISLN VALVE SWLT
NO. 2 ENG ISLN VALVE SWLT
NO. 3 ENG ISLN VALVE SWLT
AFT ISLN VALVE SWLT
INTERNAL SAME AS 3811-DS1
NOTE
* CROSS REF. TO SCHEM AND SHEET IN SAME ATA NO.
* CROSS REF. TO SCHEM IN DIFFERENT ATA NO.
3 ALL REFERENCE DESIGNATIONS ARE PREFIXED WITH 3317 UNLESS OTHERWISE SPECIFIED
4 FE/SO BRIGHT/DIM AND TEST SCHEM
5 ENGINE 1 BLEED AIR ELECTRICAL SCHEMATIC
6 ENGINE 2 BLEED AIR ELECTRICAL SCHEMATIC
7 ENGINE 3 BLEED AIR ELECTRICAL SCHEMATIC
8 AFT FUSELAGE ISOLATION VALVE SCHEMATIC
ENGINE BLEED CONTROL
NO. 1 HI PRESS LOW DUCT
NO. 2 HI PRESS LOW DUCT
NO. 3 HI PRESS LOW DUCT
START ENG ISLN VALVE OFF
APU
ISLN VALVE
ATM 02
ATM C2
WING ANTI ICE
CABIN TEMP CONTROL

Indicator Bright/Dim and Test - Card 1A35 Schematic
SCHEM 9 (Sheet 1)

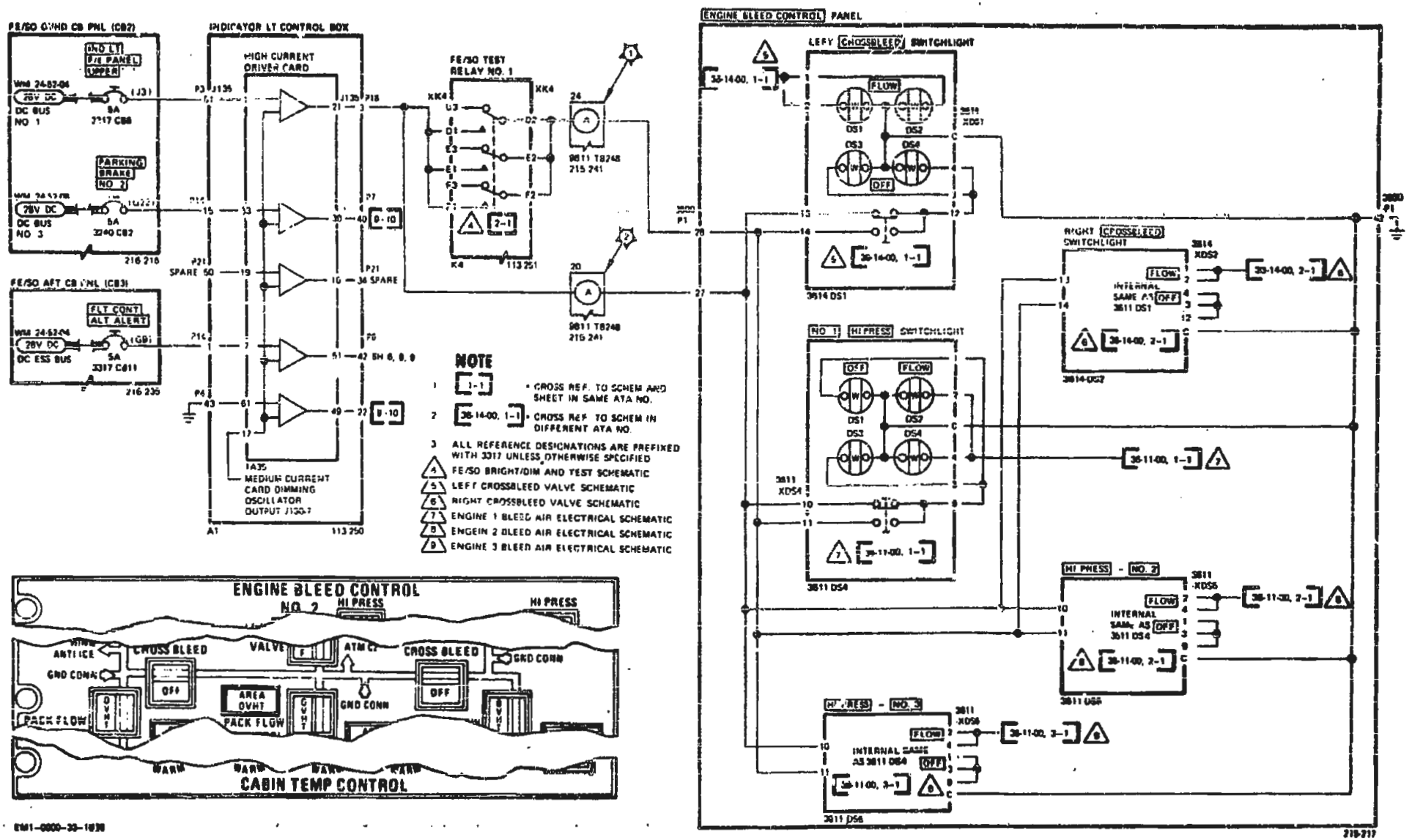

FE/SO OVHD CB PNL (C02)
INDICATOR LT CONTROL BOX
HIGH CURRENT DRIVER CARD
FE/SO TEST RELAY NO. 1
ENGINE BLEED CONTROL PANEL
NO. 1 ENG ISLN VALVE SWLT
NO. 2 ENG ISLN VALVE SWLT
NO. 3 ENG ISLN VALVE SWLT
AFT ISLN VALVE SWLT
FE/SO AFT CB PNL (C03)
MEDIUM CURRENT CARD DIMMING OSCILLATOR OUTPUT J1307
NOTE
1-1 - CROSS REF. TO SCHEM AND SHEET IN SAME ATA NO.
38-11-00, 1-1 - CROSS REF. TO SCHEM IN DIFFERENT ATA NO.
3 ALL REFERENCE DESIGNATIONS ARE PREFIXED WITH 3217 UNLESS OTHERWISE SPECIFIED
4 FE/SO BRIGHT/DIM AND TEST SCHEM
5 ENGINE 1 BLEED AIR ELECTRICAL SCHEMATIC
6 ENGINE 2 BLEED AIR ELECTRICAL SCHEMATIC
7 ENGINE 3 BLEED AIR ELECTRICAL SCHEMATIC
8 AFT FUSELAGE ISOLATION VALVE SCHEMATIC
ENGINE BLEED CONTROL
NO. 1 HI PRESS
NO. 2 HI PRESS
NO. 3 HI PRESS
START ENG ISLN VALVE
CABIN TEMP CONTROL

Indicator Bright/Dim and Test - Card 1A35 Schematic
SCHEM 9 (Sheet 1)


INDICATOR LT CONTROL BOX
HIGH CURRENT DRIVER CARD
FE/SO TEST RELAY NO. 1
ENGINE BLEED CONTROL PANEL
LEFT CROSSBLEED SWITCHLIGHT
RIGHT CROSSBLEED SWITCHLIGHT
NO. 1 HI PRESS SWITCHLIGHT
HI PRESS - NO. 2
HI PRESS - NO. 3
1A35 MEDIUM CURRENT CARD DIMMING OSCILLATOR OUTPUT J130-7
NOTE
1 [1-1] - CROSS REF. TO SCHEM AND SHEET IN SAME ATA NO.
2 [36-14-00, 1-1] - CROSS REF. TO SCHEM IN DIFFERENT ATA NO.
3 ALL REFERENCE DESIGNATIONS ARE PREFIXED WITH 3317 UNLESS OTHERWISE SPECIFIED
4 FE/SO BRIGHT/DIM AND TEST SCHEMATIC
5 LEFT CROSSBLEED VALVE SCHEMATIC
6 RIGHT CROSSBLEED VALVE SCHEMATIC
7 ENGINE 1 BLEED AIR ELECTRICAL SCHEMATIC
8 ENGEIN 2 BLEED AIR ELECTRICAL SCHEMATIC
9 ENGINE 3 BLEED AIR ELECTRICAL SCHEMATIC
ENGINE BLEED CONTROL NO. 2
CROSS BLEED VALVE
ATM CT
GND CONN
OFF
AREA OVHT
PACK FLOW
CABIN TEMP CONTROL
EM1-0003-33-01B
218-217

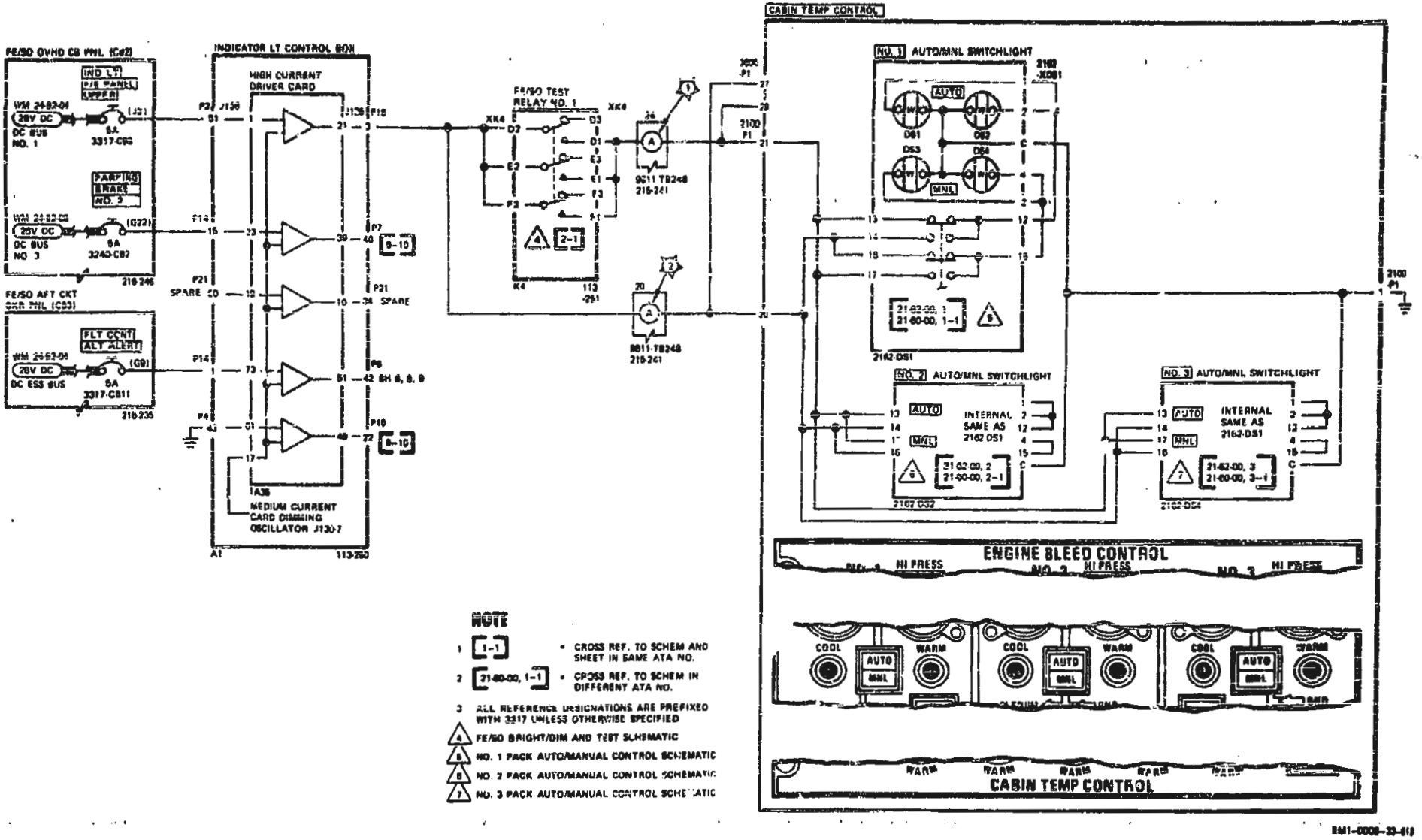
Indicator Bright/Dim and Test - Card 1A35 Schematic
SCHEM 9 (Sheet 2)

R EFFECTIVITY: 001-032
R
007B

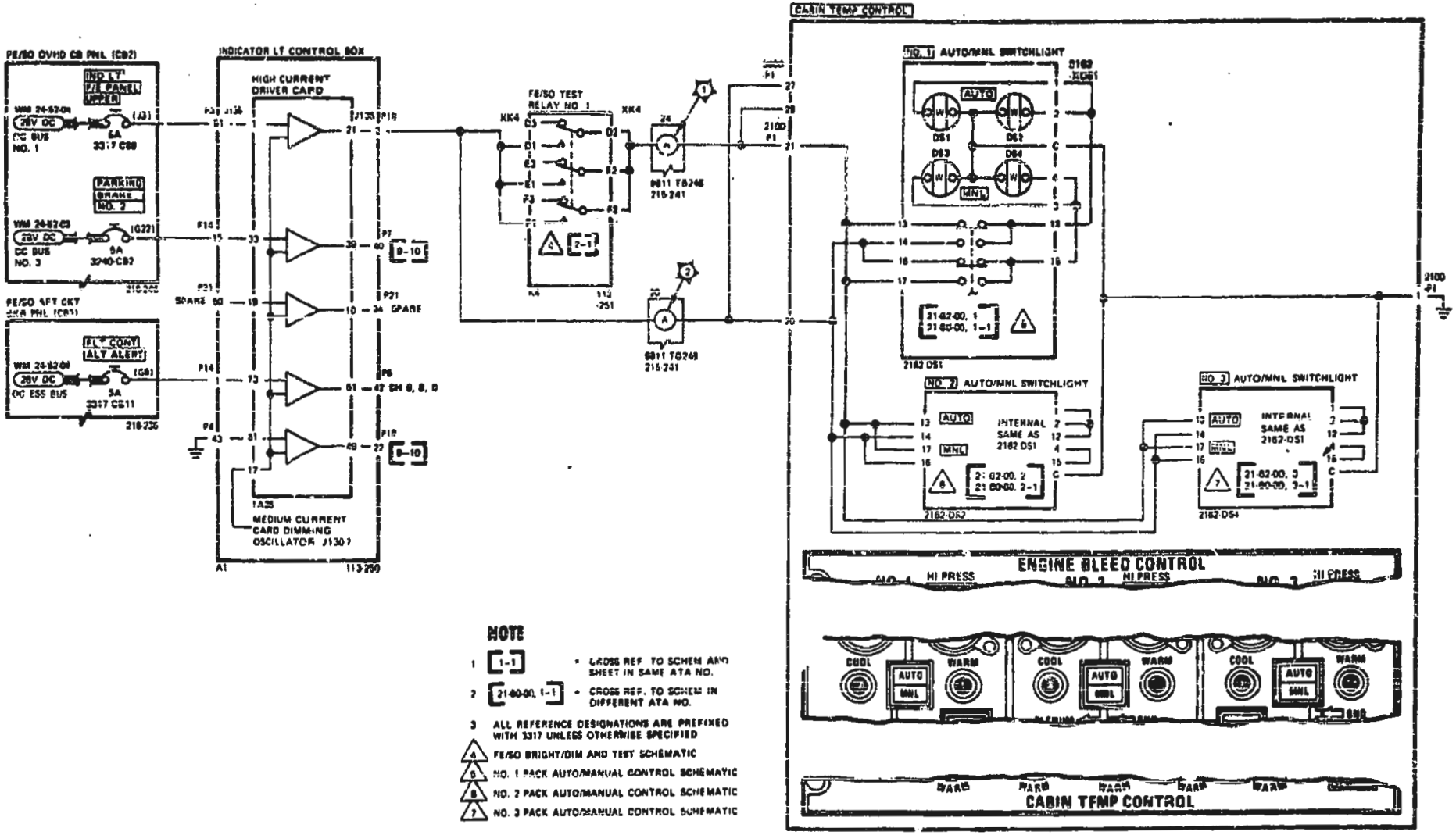

FE/SO OVHD CB PNL (CB2)
INDICATOR LT CONTROL BOX
HIGH CURRENT DRIVER CARD
FE/SO TEST RELAY NO. 1
ENGINE BLEED CONTROL PANEL
LEFT CROSSBLEED SWITCHLIGHT
RIGHT CROSSBLEED SWITCHLIGHT
NO 1 HI PRESS SWITCHLIGHT
HI PRESS - NO. 2
HI PRESS - NO. 3
FE/SO AFT CB PNL (CB3)
1A35 MEDIUM CURRENT CARD DIMMING OSCILLATOR OUTPUT J1357
NOTE
1 CROSS REF. TO SCHEM AND SHEET IN SAME ATA NO.
2 CROSS REF. TO SCHEM IN DIFFERENT ATA NO.
3 ALL REFERENCE DESIGNATIONS ARE PREFIXED WITH 3317 UNLESS OTHERWISE SPECIFIED
4 FE/SO BRIGHT/DIM AND TEST SCHEMATIC
5 LEFT CROSSBLEED VALVE SCHEMATIC
6 RIGHT CROSSBLEED VALVE SCHEMATIC
7 ENGINE 1 BLEED AIR ELECTRICAL SCHEMATIC
8 ENGEIN 2 BLEED AIR ELECTRICAL SCHEMATIC
9 ENGINE 3 BLEED AIR ELECTRICAL SCHEMATIC
ENGINE BLEED CONTROL
NO 2 HI PRESS
HI PRESS
CROSS BLEED
VALVE
CROSS BLEED
GND CONN
PACK FLOW
AREA OVHT
PACK FLOW
OFF
CABIN TEMP CONTROL

Indicator Bright/Dim and Test - Card 1A35 Schematic
SCHEM 9 (Sheet 2)

R EFFECTIVITY: 033-999
R
007B


CABIN TEMP CONTROL
INDICATOR LT CONTROL BOX
HIGH CURRENT DRIVER CARD
MEDIUM CURRENT CARD DIMMING OSCILLATOR J130-7
FE/SO TEST RELAY NO. 1
NO. 1 AUTO/MNL SWITCHLIGHT
NO. 2 AUTO/MNL SWITCHLIGHT
NO. 3 AUTO/MNL SWITCHLIGHT
INTERNAL SAME AS 2162 DS1
ENGINE BLEED CONTROL
HI PRESS
COOL
AUTO
MNL
WARM
CABIN TEMP CONTROL
NOTE
1 [1-1] • CROSS REF. TO SCHEM AND SHEET IN SAME ATA NO.
2 [21-60-00, 1-1] • CROSS REF. TO SCHEM IN DIFFERENT ATA NO.
3 ALL REFERENCE DESIGNATIONS ARE PREFIXED WITH 3317 UNLESS OTHERWISE SPECIFIED
4 FE/SO BRIGHT/DIM AND TEST SCHEMATIC
5 NO. 1 PACK AUTO/MANUAL CONTROL SCHEMATIC
6 NO. 2 PACK AUTO/MANUAL CONTROL SCHEMATIC
7 NO. 3 PACK AUTO/MANUAL CONTROL SCHEMATIC

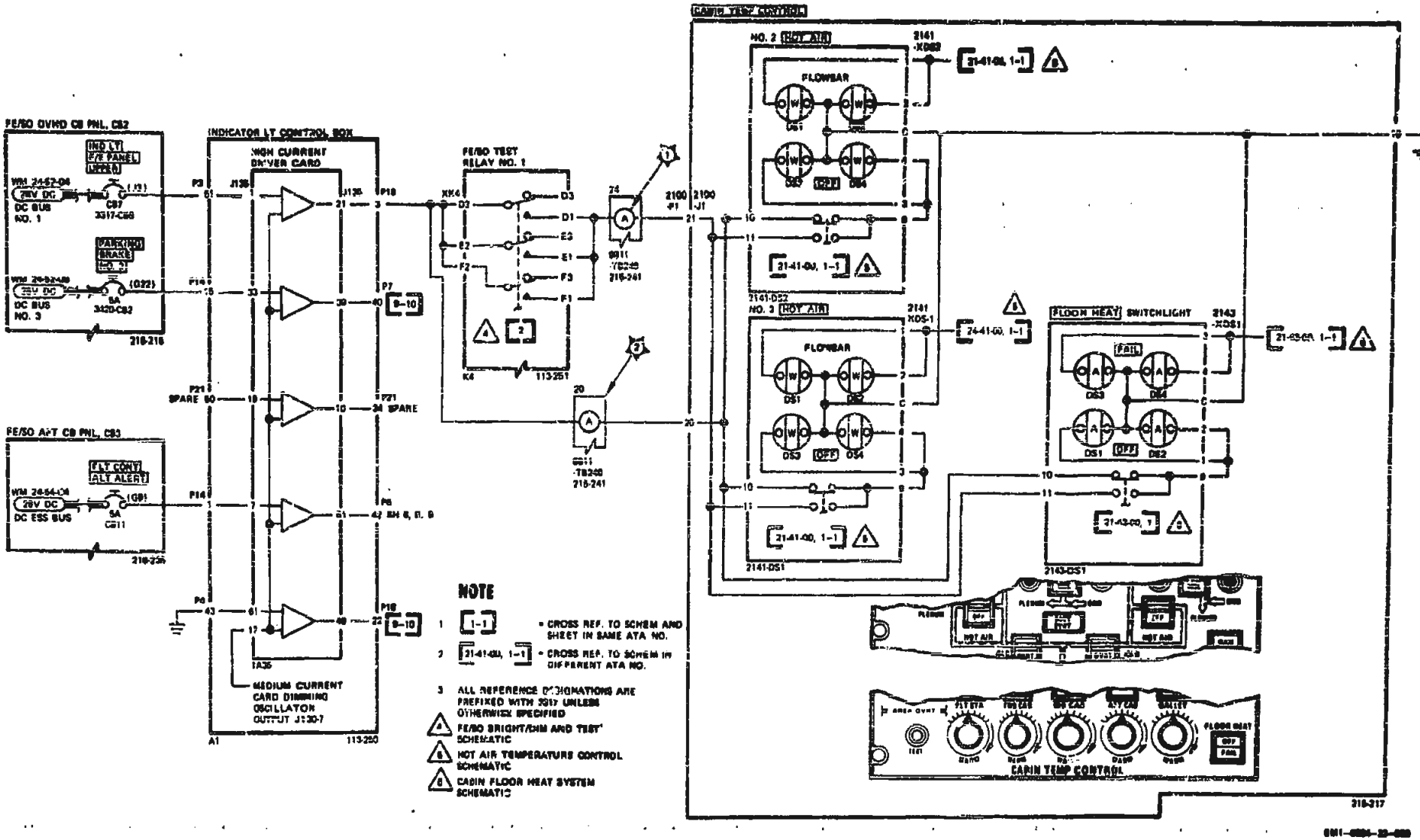
Indicator Bright/Dim and Test - Card 1A35 Schematic
SCHEM 9 (Sheet 3)


FE/SO OVHD CB PNL (CB2)
INDICATOR LT CONTROL BOX
HIGH CURRENT DRIVER CARD
FE/SO TEST RELAY NO. 1
CABIN TEMP CONTROL
NO. 1 AUTO/MNL SWITCHLIGHT
NO. 2 AUTO/MNL SWITCHLIGHT
NO. 3 AUTO/MNL SWITCHLIGHT
ENGINE BLEED CONTROL
CABIN TEMP CONTROL
MEDIUM CURRENT CARD DIMMING OSCILLATOR J1307
NOTE
1 [1-1] - CROSS REF. TO SCHEM AND SHEET IN SAME ATA NO.
2 [21-60-00, 1-1] - CROSS REF. TO SCHEM IN DIFFERENT ATA NO.
3 ALL REFERENCE DESIGNATIONS ARE PREFIXED WITH 1317 UNLESS OTHERWISE SPECIFIED
4 FE/SO BRIGHT/DIM AND TEST SCHEMATIC
5 NO. 1 PACK AUTO/MANUAL CONTROL SCHEMATIC
6 NO. 2 PACK AUTO/MANUAL CONTROL SCHEMATIC
7 NO. 3 PACK AUTO/MANUAL CONTROL SCHEMATIC

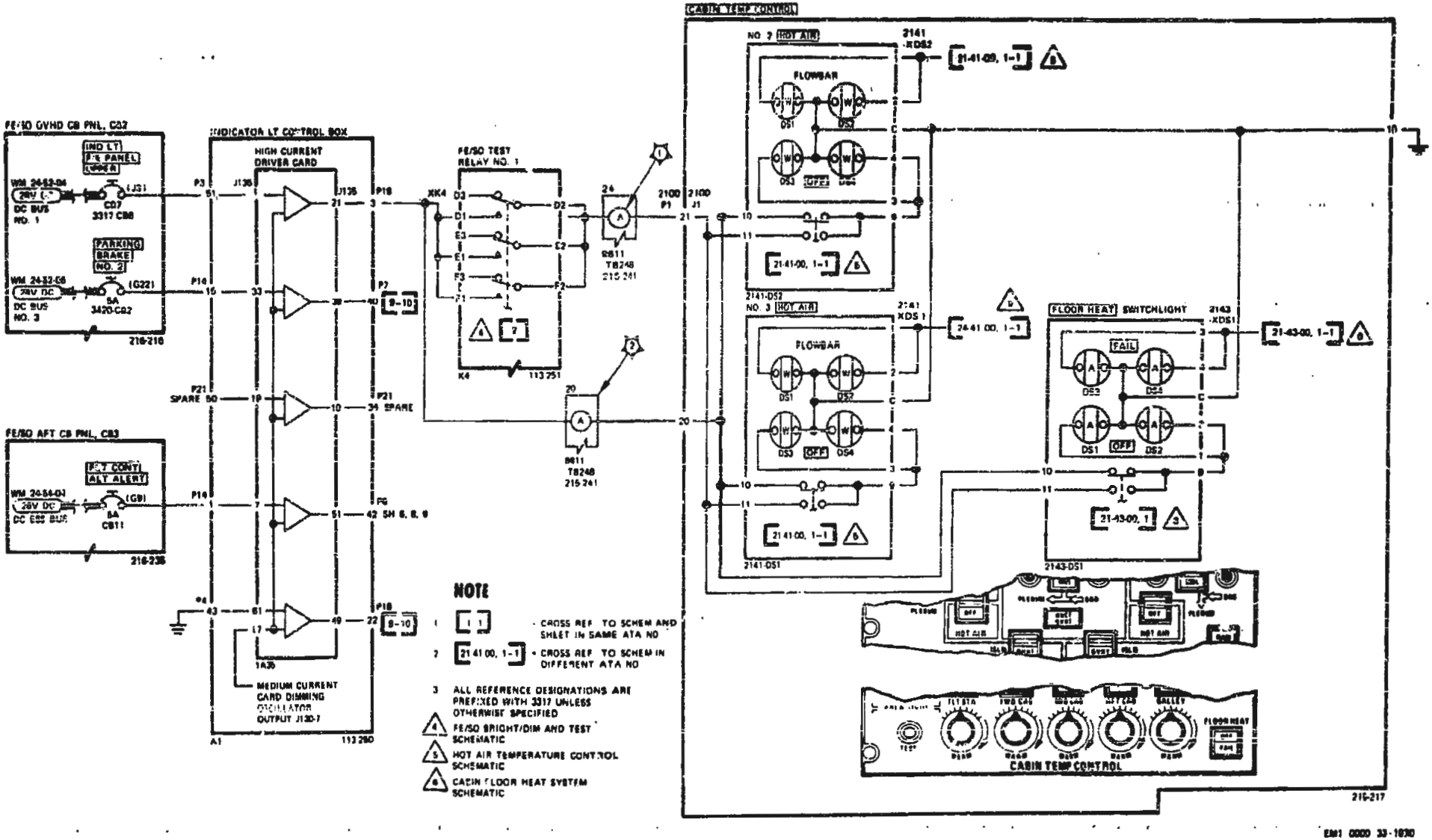
R Indicator Bright/Dim and Test - Card 1A35 Schematic
R SCHEM 9 (Sheet 3)

EFFECTIVITY: 033-999

007B

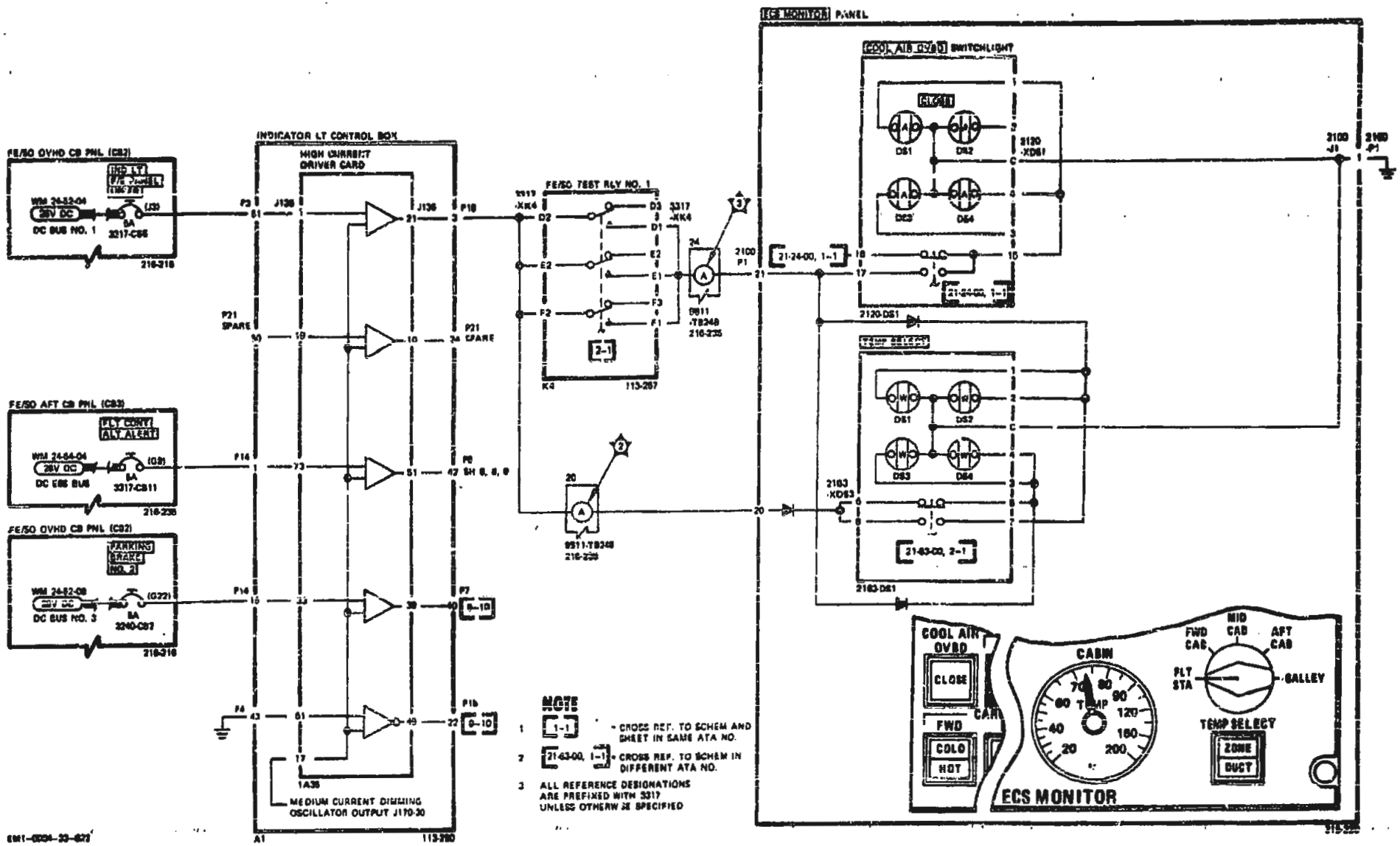

FE/SO OVHD CB PNL, CB2
INDICATOR LT CONTROL BOX
HIGH CURRENT DRIVER CARD
FE/SO TEST RELAY NO. 1
CABIN TEMP CONTROL
NO. 2 HOT AIR
NO. 3 HOT AIR
FLOWBAR
FLOOR HEAT SWITCHLIGHT
FE/SO AFT CB PNL, CB3
MEDIUM CURRENT CARD DIMMING OSCILLATOR OUTPUT J130-7
CABIN TEMP CONTROL
NOTE
1 1-1 = CROSS REF. TO SCHEM AND SHEET IN SAME ATA NO.
2 21-41-00, 1-1 = CROSS REF. TO SCHEM IN DIFFERENT ATA NO.
3 ALL REFERENCE DESIGNATIONS ARE PREFIXED WITH 3317 UNLESS OTHERWISE SPECIFIED
A FE/SO BRIGHT/DIM AND TEST SCHEMATIC
B HOT AIR TEMPERATURE CONTROL SCHEMATIC
C CABIN FLOOR HEAT SYSTEM SCHEMATIC

Indicator Bright/Dim and Test - Card 1A35 Schematic
SCHEM 9 (Sheet 4)

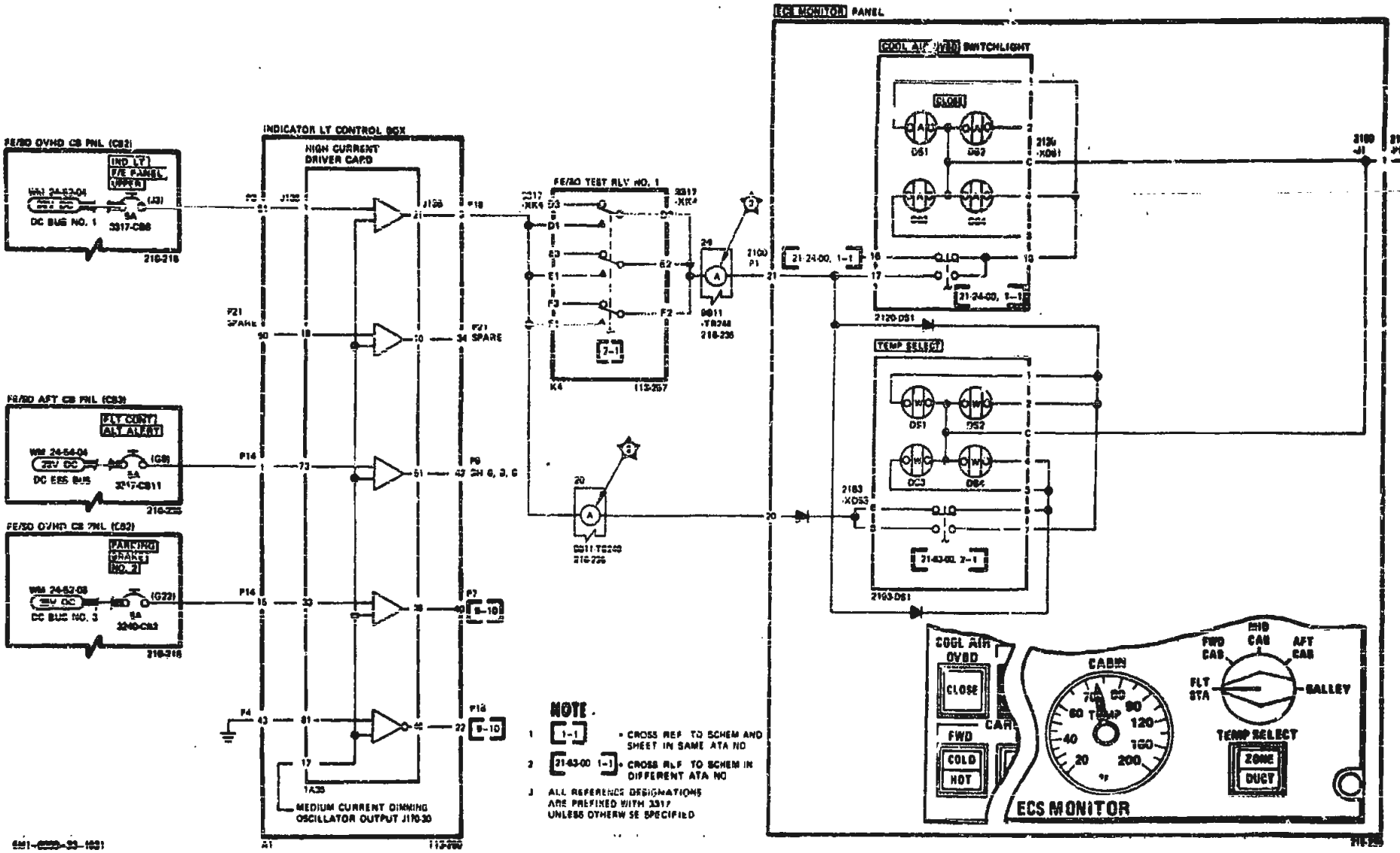

CABIN TEMP CONTROL
FE/SO OVHD CB PNL, C02
INDICATOR LT CONTROL BOX
HIGH CURRENT DRIVER CARD
FE/SO TEST RELAY NO. 1
NO. 2 HOT AIR
NO. 3 HOT AIR
FLOWBAR
FLOOR HEAT SWITCHLIGHT
FAIL
OFF
FE/SO AFT CB PNL, C83
MEDIUM CURRENT CARD DIMMING OSCILLATOR OUTPUT J130-7
CABIN TEMP CONTROL
NOTE
1 [ ] - CROSS REF TO SCHEM AND SHEET IN SAME ATA NO
2 [21-41-00, 1-1] - CROSS REF TO SCHEM IN DIFFERENT ATA NO
3 ALL REFERENCE DESIGNATIONS ARE PREFIXED WITH 3317 UNLESS OTHERWISE SPECIFIED
4 FE/SO BRIGHT/DIM AND TEST SCHEMATIC
5 HOT AIR TEMPERATURE CONTROL SCHEMATIC
6 CABIN FLOOR HEAT SYSTEM SCHEMATIC

Indicator Bright/Dim and Test - Card 1A35 Schematic
SCHEM 9 (Sheet 4)

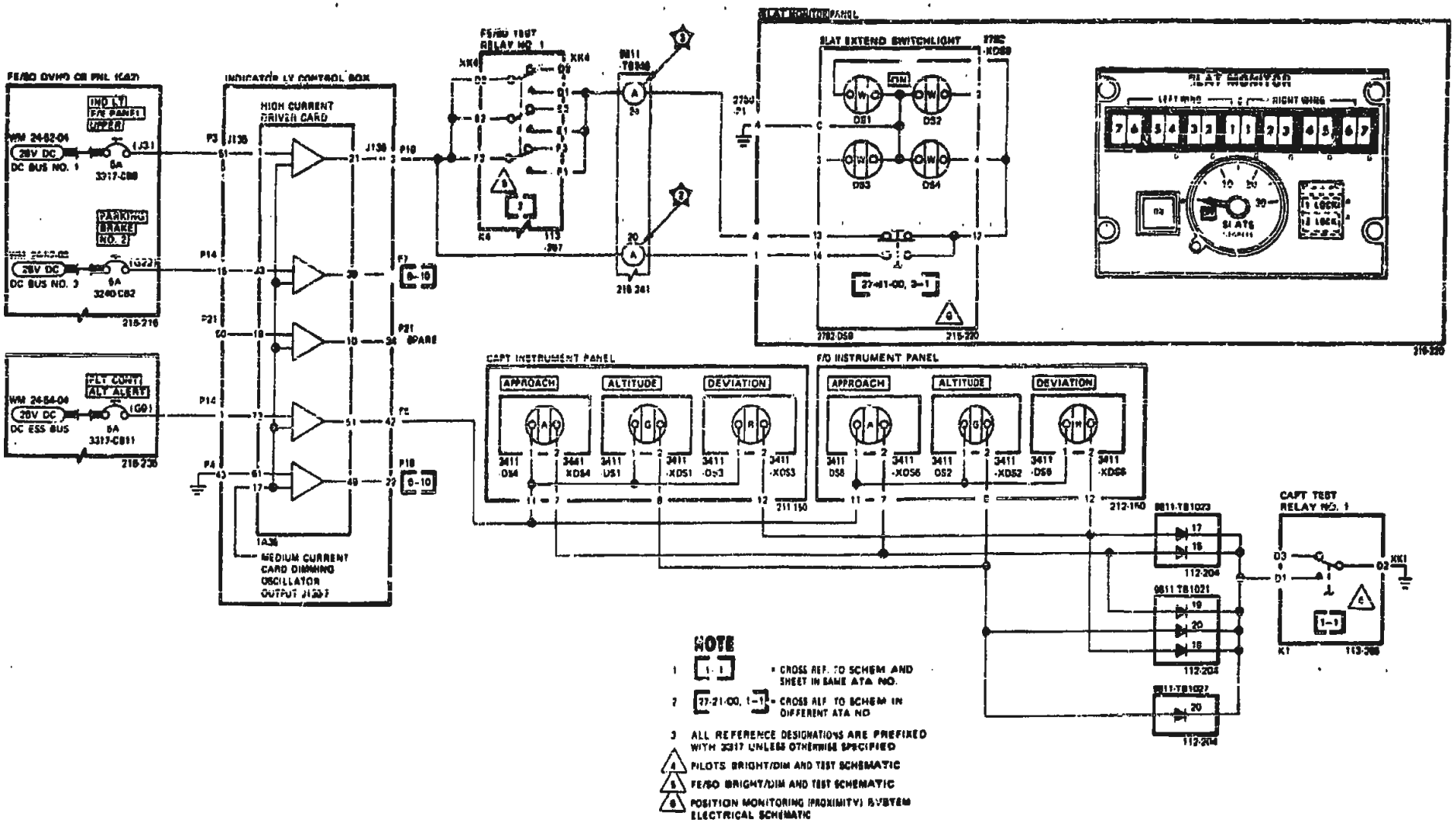
R EFFECTIVITY: 033-999
R
0078



Indicator Bright/Dim and Test - Card 1A35 Schematic
SCHEM 9 (Sheet 5)

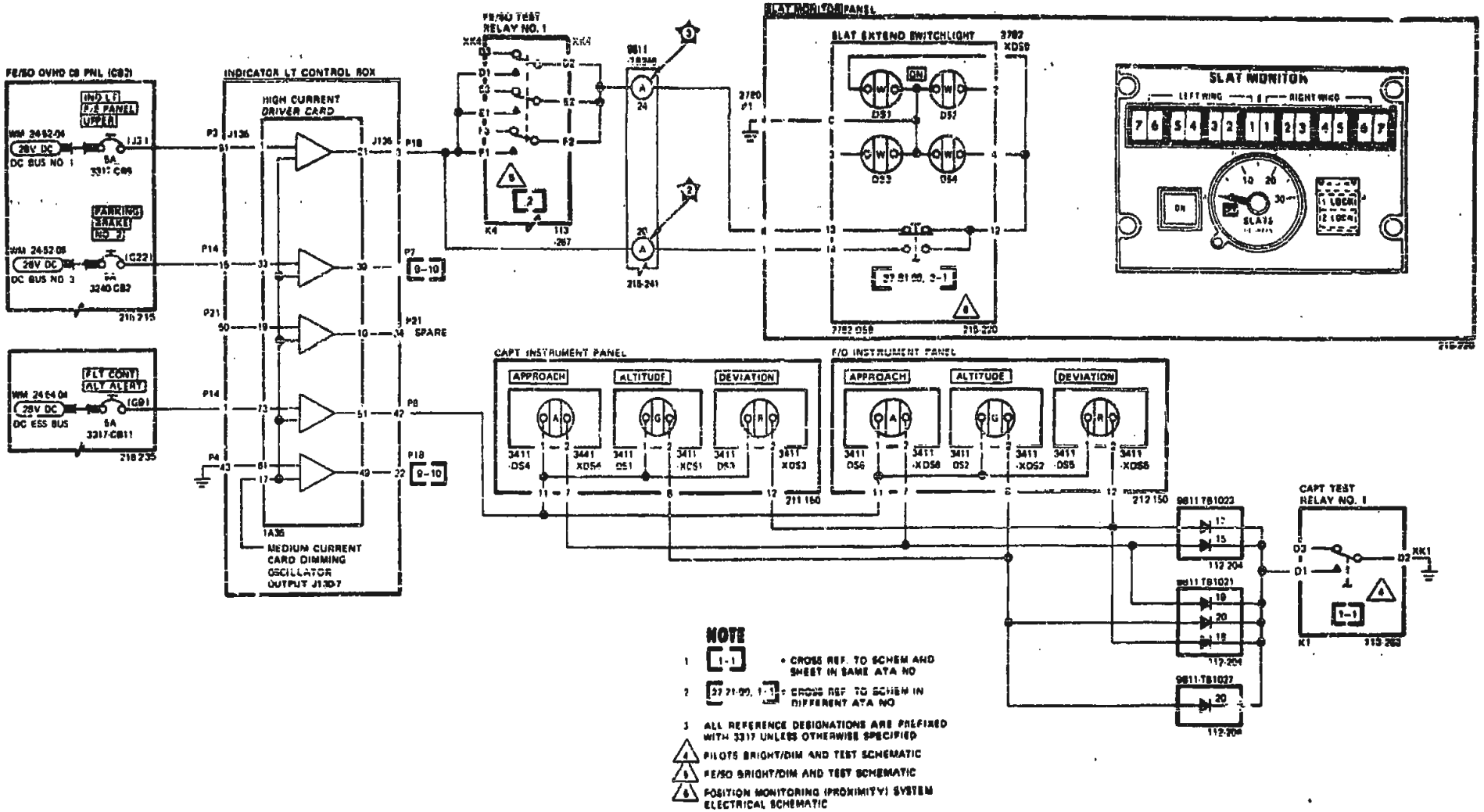


Indicator Bright/Dim and Test - Card 1A35 Schematic
SCHEM 9 (Sheet 5)


INDICATOR LT CONTROL BOX
HIGH CURRENT DRIVER CARD
MEDIUM CURRENT CARD DIMMING OSCILLATOR OUTPUT J1337
FE/SO TEST RELAY NO. 1
SLAT EXTEND SWITCHLIGHT
SLAT MONITOR
CAPT INSTRUMENT PANEL
F/O INSTRUMENT PANEL
APPROACH
ALTITUDE
DEVIATION
CAPT TEST RELAY NO. 1
28V DC
DC BUS NO. 1
DC BUS NO. 2
DC ESS BUS
PARKING BRAKE NO. 2
FLT CONT ALT ALERT
NOTE
1 [1-1] = CROSS REF. TO SCHEM AND SHEET IN SAME ATA NO.
2 [27-21-00, 1-1] = CROSS REF. TO SCHEM IN DIFFERENT ATA NO
3 ALL REFERENCE DESIGNATIONS ARE PREFIXED WITH 3317 UNLESS OTHERWISE SPECIFIED
4 PILOTS BRIGHT/DIM AND TEST SCHEMATIC
5 FE/SO BRIGHT/DIM AND TEST SCHEMATIC
6 POSITION MONITORING (PROXIMITY) SYSTEM ELECTRICAL SCHEMATIC

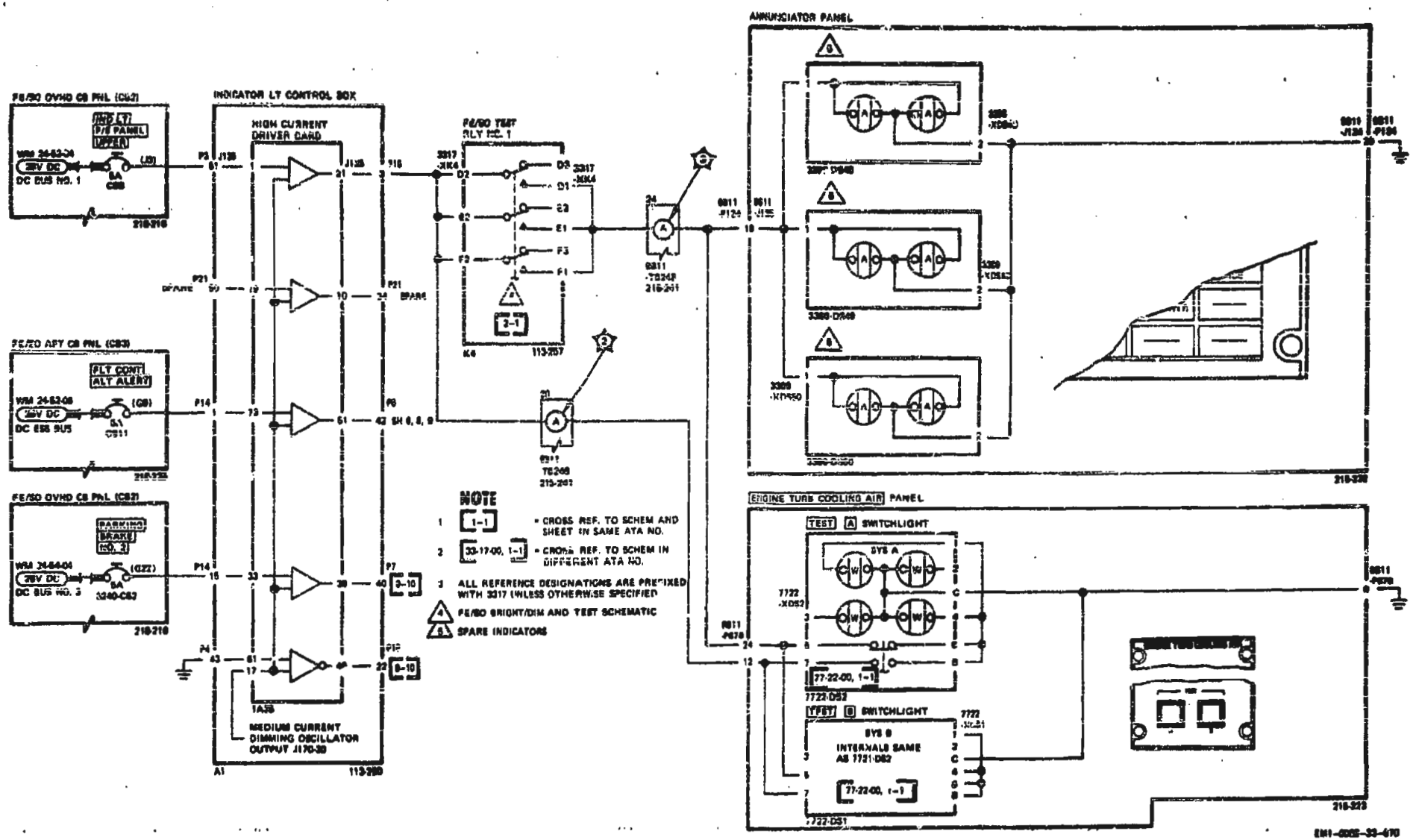
Indicator Bright/Dim and Test - Card 1A35 Schematic
SCHEM 9 (Sheet 6)

R EFFECTIVITY: 001-032
R
0079

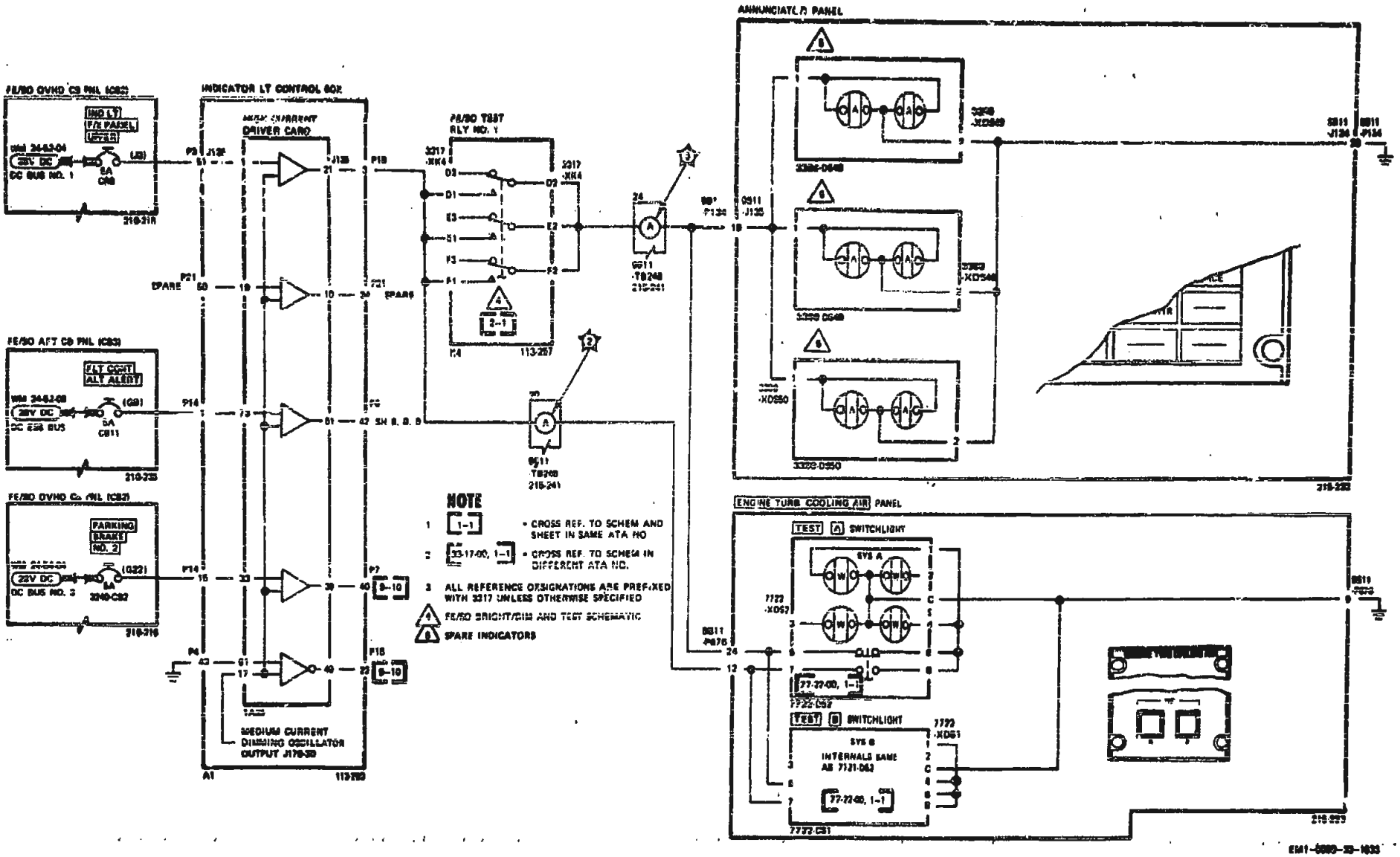

F/E&O OVHD CB PNL (CB2)
INDICATOR LT CONTROL BOX
HIGH CURRENT DRIVER CARD
F/E&O TEST RELAY NO. 1
SLAT EXTEND SWITCHLIGHT
SLAT MONITOR
SLAT MONITOR PANEL
CAPT INSTRUMENT PANEL
F/O INSTRUMENT PANEL
APPROACH
ALTITUDE
DEVIATION
CAPT TEST RELAY NO. 1
MEDIUM CURRENT CARD DIMMING OSCILLATOR OUTPUT J1307
NOTE
1 [1-1] • CROSS REF. TO SCHEM AND SHEET IN SAME ATA NO
2 [27 21-00, 1-1] • CROSS REF. TO SCHEM IN DIFFERENT ATA NO
3 ALL REFERENCE DESIGNATIONS ARE PREFIXED WITH 3317 UNLESS OTHERWISE SPECIFIED
4 PILOTS BRIGHT/DIM AND TEST SCHEMATIC
5 F/E&O BRIGHT/DIM AND TEST SCHEMATIC
6 POSITION MONITORING (PROXIMITY) SYSTEM ELECTRICAL SCHEMATIC

Indicator Bright/Dim and Test - Card 1A35 Schematic
SCHEM 9 (Sheet 6)

R
R
007B EFFECTIVITY: 033-999

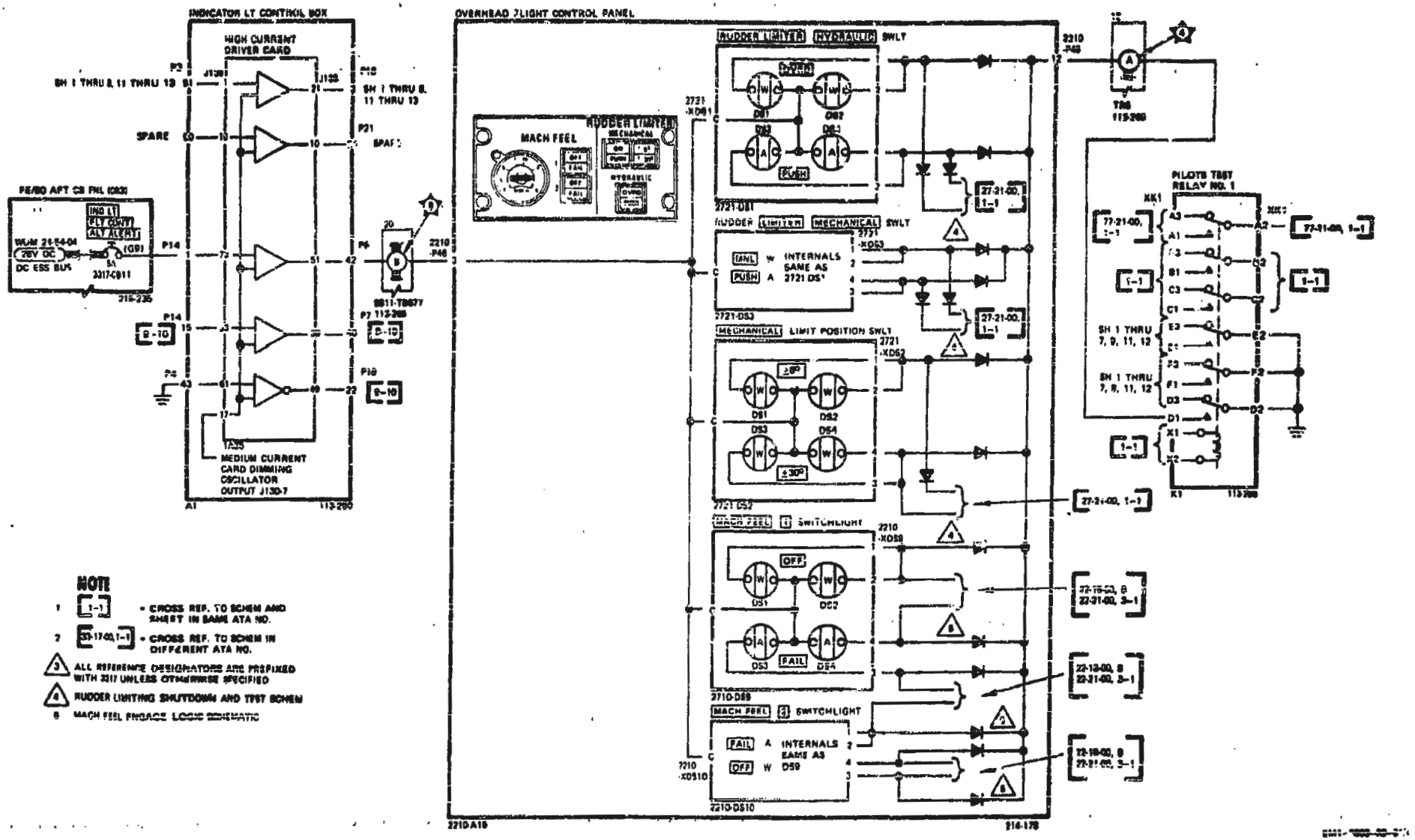

ANNUNCIATOR PANEL
INDICATOR LT CONTROL BOX
HIGH CURRENT DRIVER CARD
MEDIUM CURRENT DIMMING OSCILLATOR OUTPUT J170-30
FE/EO TEST RLY NO. 1
FE/EO OVHD CB PNL (CB2)
FE/EO AFT CB PNL (CB3)
FE/EO OVHD CB PNL (CB2)
ENGINE TURB COOLING AIR PANEL
TEST A SWITCHLIGHT
TEST B SWITCHLIGHT
INTERNALS SAME AS 7721-052
NOTE
1 [1-1] = CROSS REF. TO SCHEM AND SHEET IN SAME ATA NO.
2 [33-17-00, 1-1] = CROSS REF. TO SCHEM IN DIFFERENT ATA NO.
3 ALL REFERENCE DESIGNATIONS ARE PREFIXED WITH 3317 UNLESS OTHERWISE SPECIFIED
4 FE/EO BRIGHT/DIM AND TEST SCHEMATIC
5 SPARE INDICATORS

Indicator Bright/Dim and Test - Card 1A35 Schematic
SCHEM 9 (Sheet 7)


ANNUNCIATOR PANEL
INDICATOR LT CONTROL BOX
MEDIUM CURRENT DRIVER CARD
MEDIUM CURRENT DIMMING OSCILLATOR OUTPUT J178-39
F/E/SO TEST RLY NO. 1
F/E/SO OVHD CB PNL (CB2)
F/E/SO AFT CB PNL (CB3)
F/E/SO OVHD CB PNL (CB7)
ENGINE TURB COOLING AIR PANEL
TEST A SWITCHLIGHT
TEST B SWITCHLIGHT
NOTE
1 CROSS REF. TO SCHEM AND SHEET IN SAME ATA NO
2 CROSS REF. TO SCHEM IN DIFFERENT ATA NO.
3 ALL REFERENCE DESIGNATIONS ARE PREFIXED WITH 3317 UNLESS OTHERWISE SPECIFIED
A F/E/SO BRIGHT/DIM AND TEST SCHEMATIC
B SPARE INDICATORS

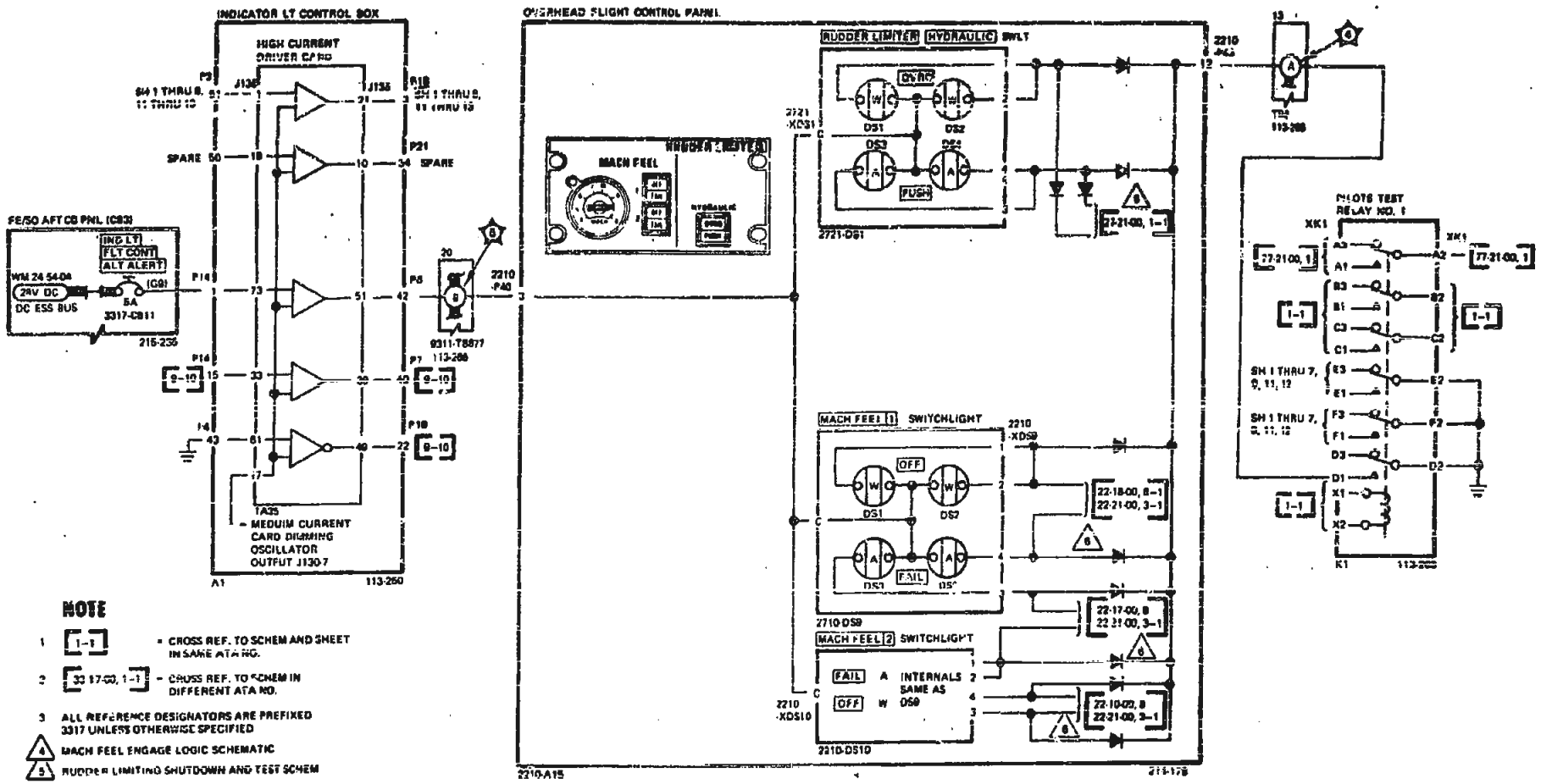
Indicator Bright/Dim and Test - Card 1A35 Schematic
SCHEM 9 (Sheet 7)

R EFFECTIVITY: 033-999
R
0079


INDICATOR LT CONTROL BOX
HIGH CURRENT DRIVER CARD
SPARE
MEDIUM CURRENT CARD DIMMING OSCILLATOR OUTPUT J130-7
OVERHEAD FLIGHT CONTROL PANEL
MACH FEEL
RUDDER LIMITER
HYDRAULIC
MECHANICAL
LIMIT POSITION SWLT
SWITCHLIGHT
INTERNALS SAME AS 2721 DS1
INTERNALS SAME AS DS9
PILOTS TEST RELAY NO. 1
NOTE
CROSS REF. TO SCHEM AND SHEET IN SAME ATA NO.
CROSS REF. TO SCHEM IN DIFFERENT ATA NO.
ALL REFERENCE DESIGNATORS ARE PREFIXED WITH 3317 UNLESS OTHERWISE SPECIFIED
RUDDER LIMITING SHUTDOWN AND TEST SCHEM
MACH FEEL PROBE LOGIC SCHEMATIC

Indicator Bright/Dim and Test - Card 1A35 Schematic
SCHEM 9 (Sheet 8)

R EFFECTIVITY: 001-031 WITHOUT SB27-169
R
007B



NOTE

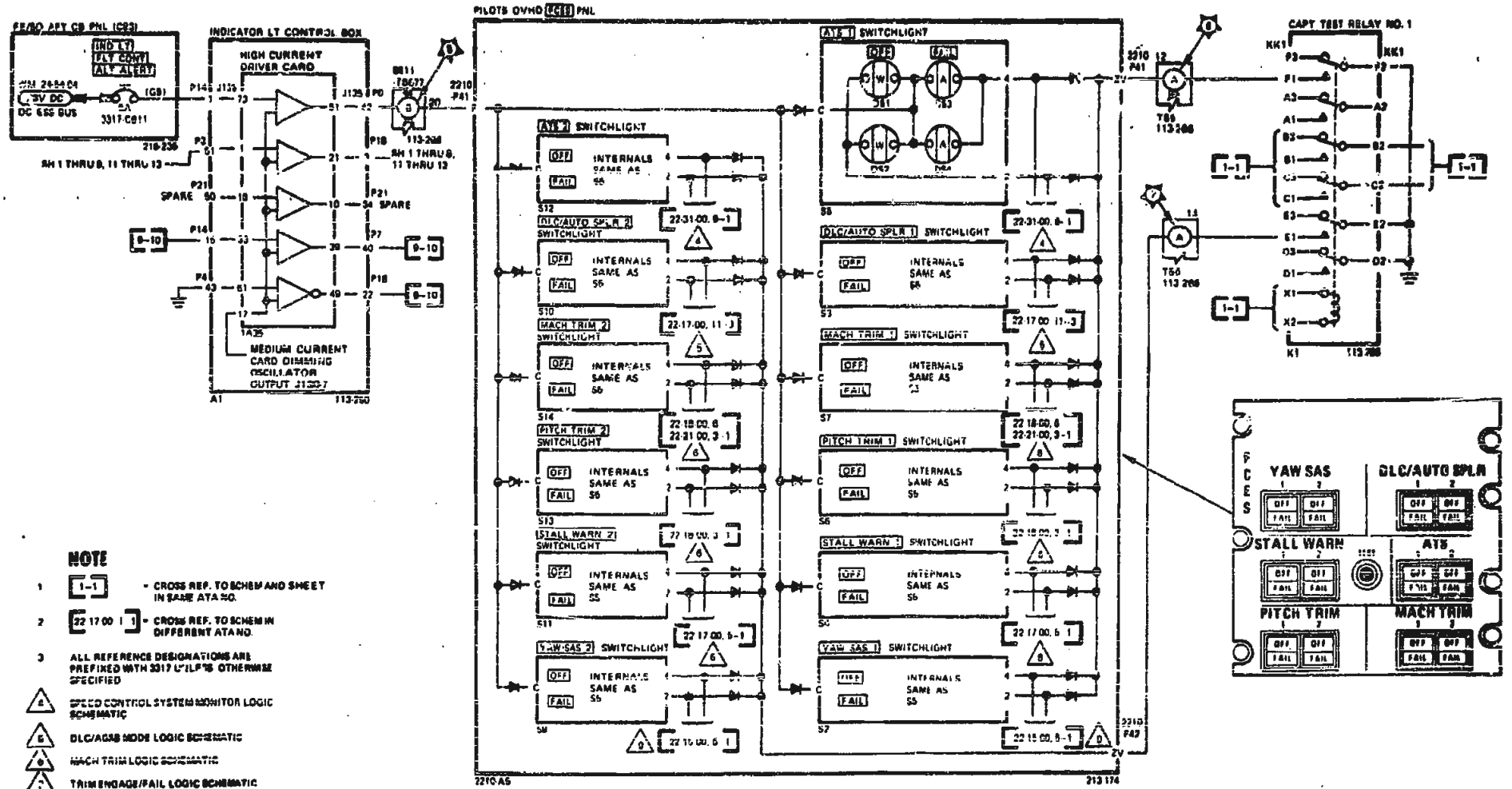
1. 1-1 = CROSS REF. TO SCHEM AND SHEET IN SAME ATA NO.
2. 33-17-00, 1-1 = CROSS REF. TO SCHEM IN DIFFERENT ATA NO.
3. ALL REFERENCE DESIGNATORS ARE PREFIXED 3317 UNLESS OTHERWISE SPECIFIED
4. MACH FEEL ENGAGE LOGIC SCHEMATIC
5. RUDDER LIMITING SHUTDOWN AND TEST SCHEM

EM1-0001-33-117

Indicator Bright/Dim and Test - Card 1A35 Schematic
SCHEM 9 (Sheet 8)

R
R
007B

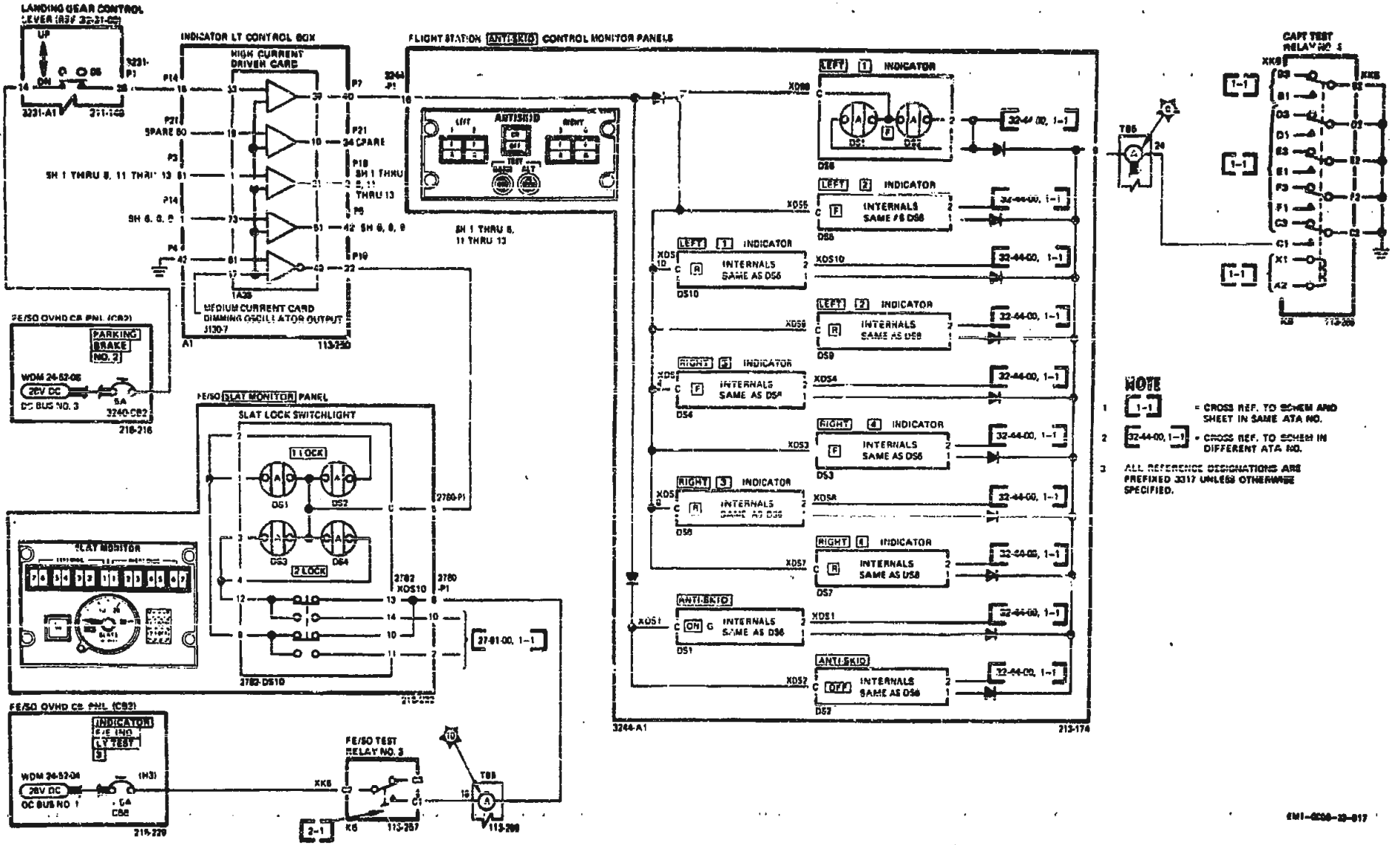
EFFECTIVITY: 001-017 WITH SB27-169 AND 032-999


INDICATOR LT CONTROL BOX
HIGH CURRENT DRIVER CARD
MEDIUM CURRENT CARD DIMMING OSCILLATOR OUTPUT
PILOTS OVHD PNL
CAPT TEST RELAY NO. 1
YAW SAS
DLC/AUTO SPLR
STALL WARN
ATS
PITCH TRIM
MACH TRIM
NOTE
CROSS REF. TO SCHEM AND SHEET IN SAME ATA NO.
CROSS REF. TO SCHEM IN DIFFERENT ATA NO.
ALL REFERENCE DESIGNATIONS ARE PREFIXED WITH 3317 UNLESS OTHERWISE SPECIFIED
SPEED CONTROL SYSTEM MONITOR LOGIC SCHEMATIC
DLC/AGSB MODE LOGIC SCHEMATIC
MACH TRIM LOGIC SCHEMATIC
TRIM ENGAGE/FAIL LOGIC SCHEMATIC
STALL WARNING SCHEMATIC
YAW SAS ENGAGED LOGIC AND ANNUNCIATOR LOGIC

Indicator Bright/Dim and Test - Card 1A35 Schematic
SCHEM 9 (Sheet 9)

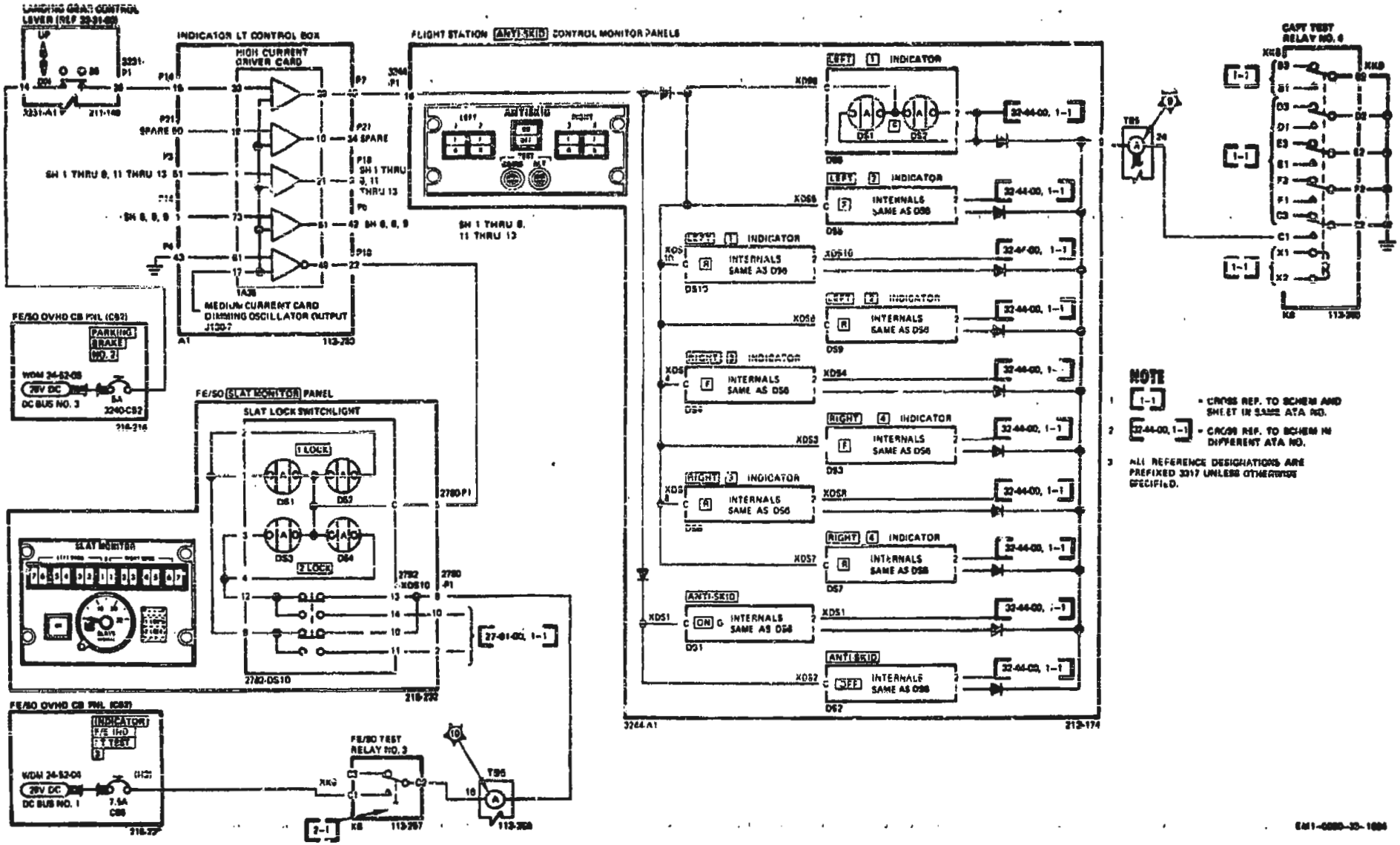
EFFECTIVITY: ALL

0078


LANDING GEAR CONTROL LEVER (R3F 32-31-00)
INDICATOR LT CONTROL BOX
HIGH CURRENT DRIVEN CARD
FLIGHT STATION ANTI-SKID CONTROL MONITOR PANELS
MEDIUM CURRENT CARD
DIMMING OSCILLATOR OUTPUT
FE/SO OVHD CB PNL (CB2)
PARKING BRAKE NO. 2
FE/SO SLAT MONITOR PANEL
SLAT LOCK SWITCHLIGHT
SLAT MONITOR
FE/SO OVHD CB PNL (CB2)
INDICATOR LT TEST
FE/SO TEST RELAY NO. 3
CAPT TEST RELAY NO. 3
LEFT 1 INDICATOR
LEFT 2 INDICATOR
RIGHT 3 INDICATOR
RIGHT 4 INDICATOR
ANTI-SKID
NOTE
1 = CROSS REF. TO SCHEM AND SHEET IN SAME ATA NO.
2 = CROSS REF. TO SCHEM IN DIFFERENT ATA NO.
3 ALL REFERENCE DESIGNATIONS ARE PREFIXED 3317 UNLESS OTHERWISE SPECIFIED.

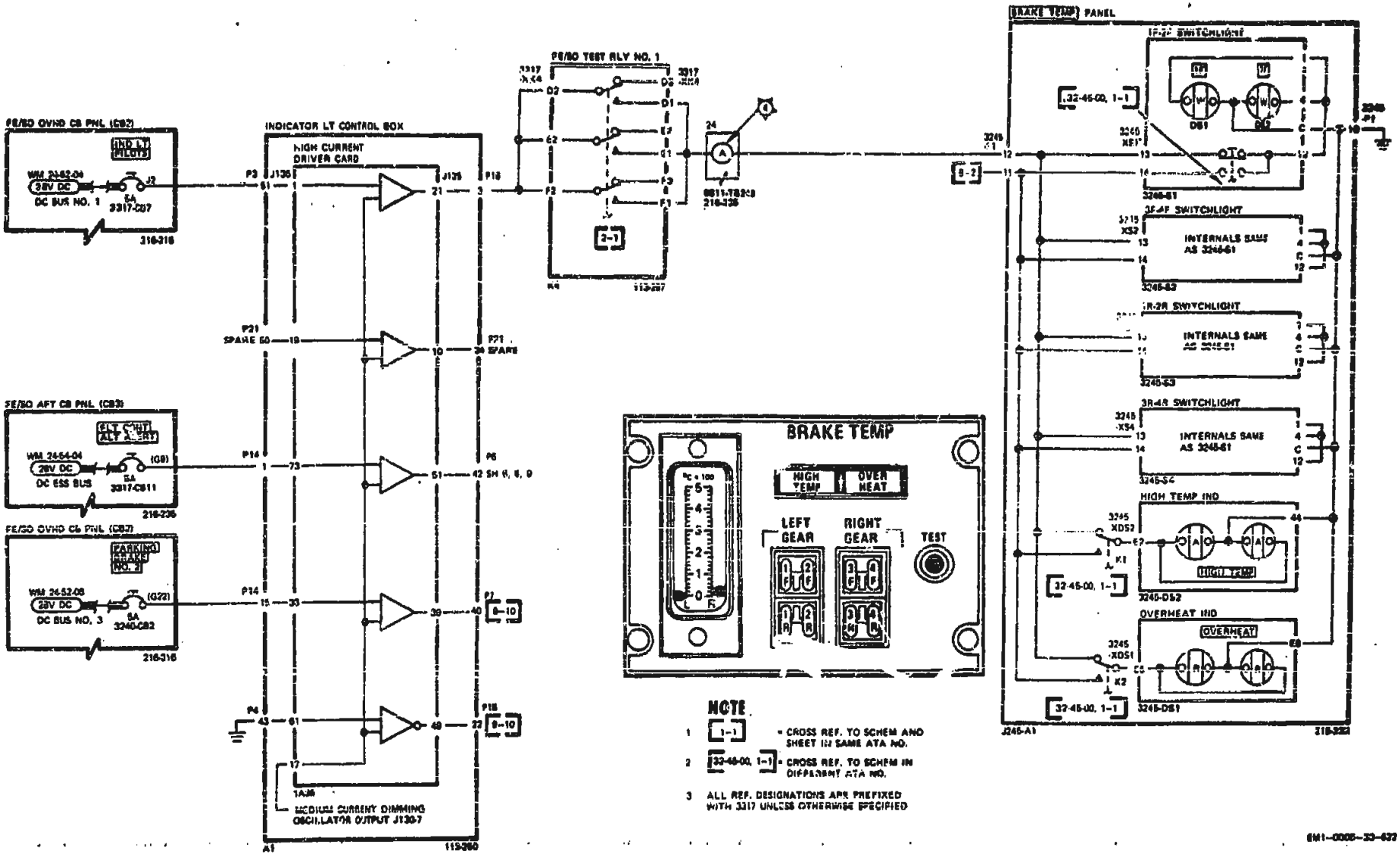
Indicator Bright/Dim and Test - Card 1A35 Schematic
SCHEM 9 (Sheet 10)

EFFECTIVITY: 001-032


INDICATOR LT CONTROL BOX
HIGH CURRENT DRIVER CARD
MEDIUM CURRENT CARD
DIMMING OSCILLATOR (OUTPUT
FLIGHT STATION ANTI-SKID CONTROL MONITOR PANELS
SH 1 THRU 8, 11 THRU 13
FE/SO OVHD CB PNL (C82)
PARKING BRAKE
DC BUS NO. 3
FE/SO SLAT MONITOR PANEL
SLAT LOCK SWITCHLIGHT
SLAT INDICATOR
FE/SO OVHD CB PNL (C87)
INDICATORS
F/E IND
DC BUS NO. 1
FE/SO TEST RELAY NO. 3
CAPT TEST RELAY NO. 4
LEFT 1 INDICATOR
LEFT 2 INDICATOR
RIGHT 3 INDICATOR
RIGHT 4 INDICATOR
ANTI-SKID
INTERNALS SAME AS DS6
NOTE
CROSS REF. TO SCHEM AND SHEET IN SAME ATA NO.
CROSS REF. TO SCHEM IN DIFFERENT ATA NO.
ALL REFERENCE DESIGNATIONS ARE PREFIXED 3317 UNLESS OTHERWISE SPECIFIED.

Indicator Bright/Dim and Test - Card 1A35 Schematic
SCHEM 9 (Sheet 10)

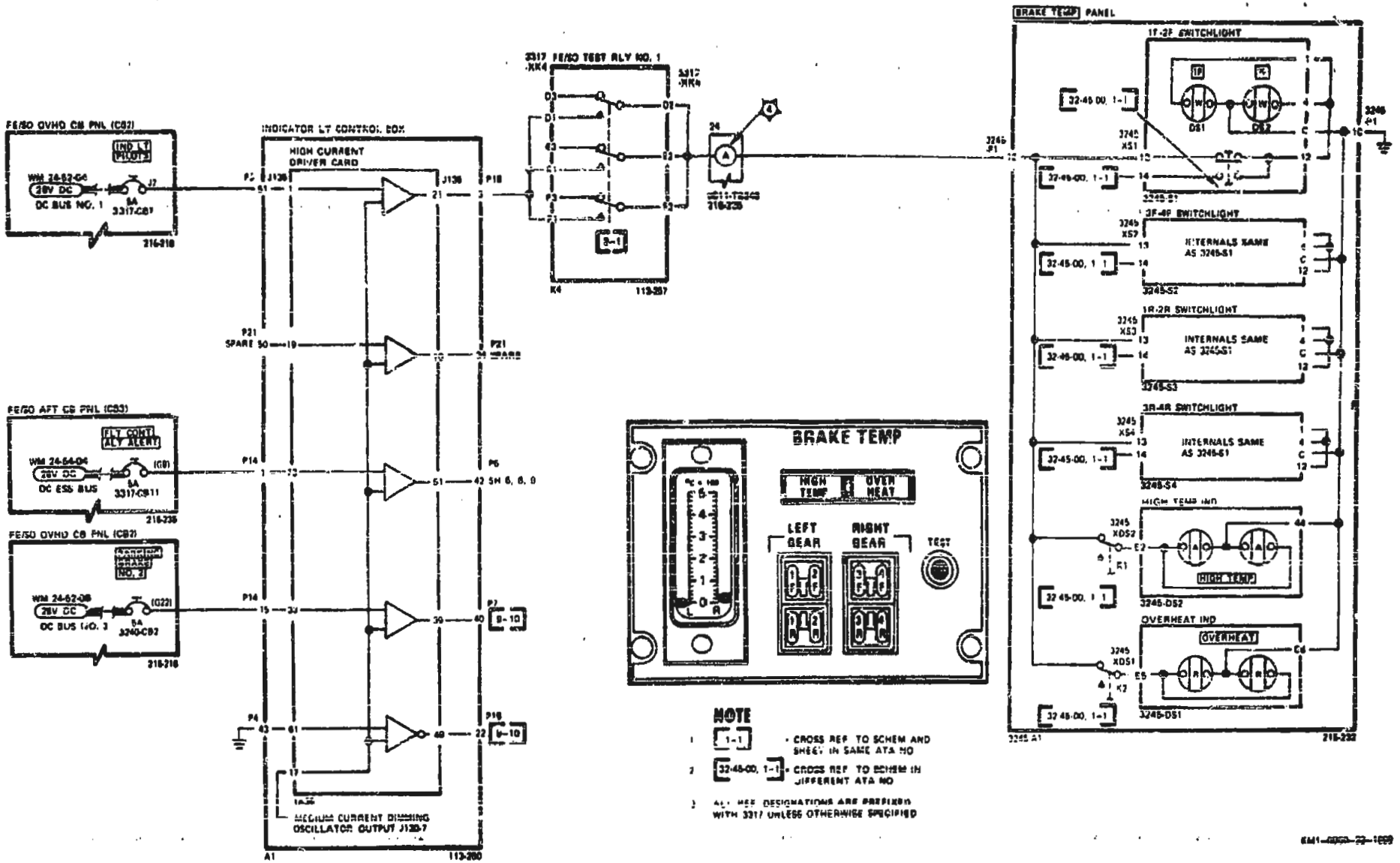
R EFFECTIVITY: 033-999
R
007B


FE/SO OVHD CB PNL (CB2)
DC BUS NO. 1
INDICATOR LT CONTROL BOX
HIGH CURRENT DRIVER CARD
FE/SO TEST RLY NO. 1
BRAKE TEMP PANEL
FE/SO AFT CB PNL (CB3)
DC ESS BUS
FE/SO OVHD CB PNL (CB7)
DC BUS NO. 3
BRAKE TEMP
HIGH TEMP
OVER HEAT
LEFT GEAR
RIGHT GEAR
TEST
HIGH TEMP IND
OVERHEAT IND
MEDIUM CURRENT DIMMING OSCILLATOR OUTPUT J1307
NOTE
1 [1-1] = CROSS REF. TO SCHEM AND SHEET IN SAME ATA NO.
2 [32-45-00, 1-1] = CROSS REF. TO SCHEM IN DIFFERENT ATA NO.
3 ALL REF. DESIGNATIONS ARE PREFIXED WITH 3317 UNLESS OTHERWISE SPECIFIED

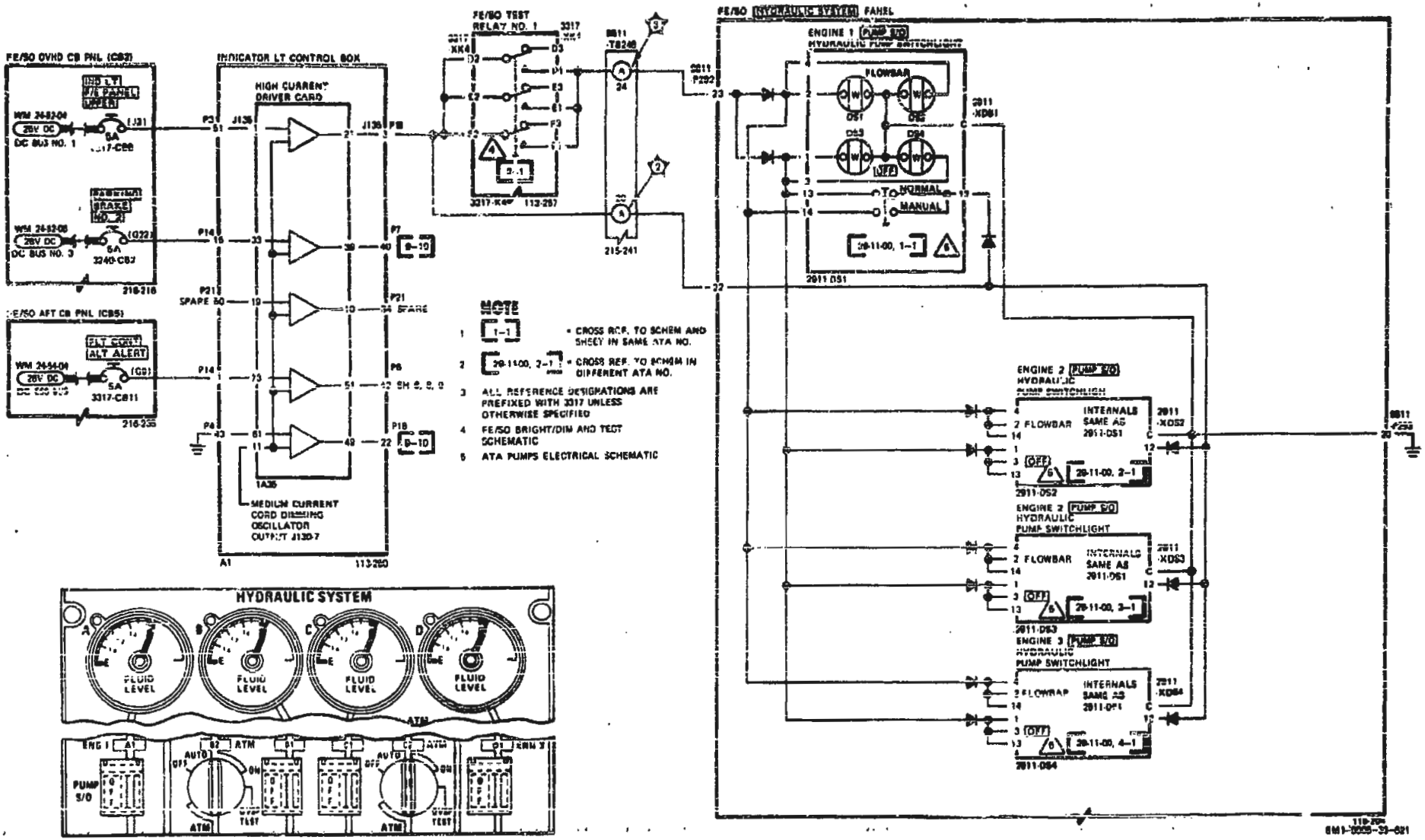
R Indicator Bright/Dim and Test - Card 1A35 Schematic
R SCHEM 9 (Sheet 11)

EFFECTIVITY: 001-032

007B

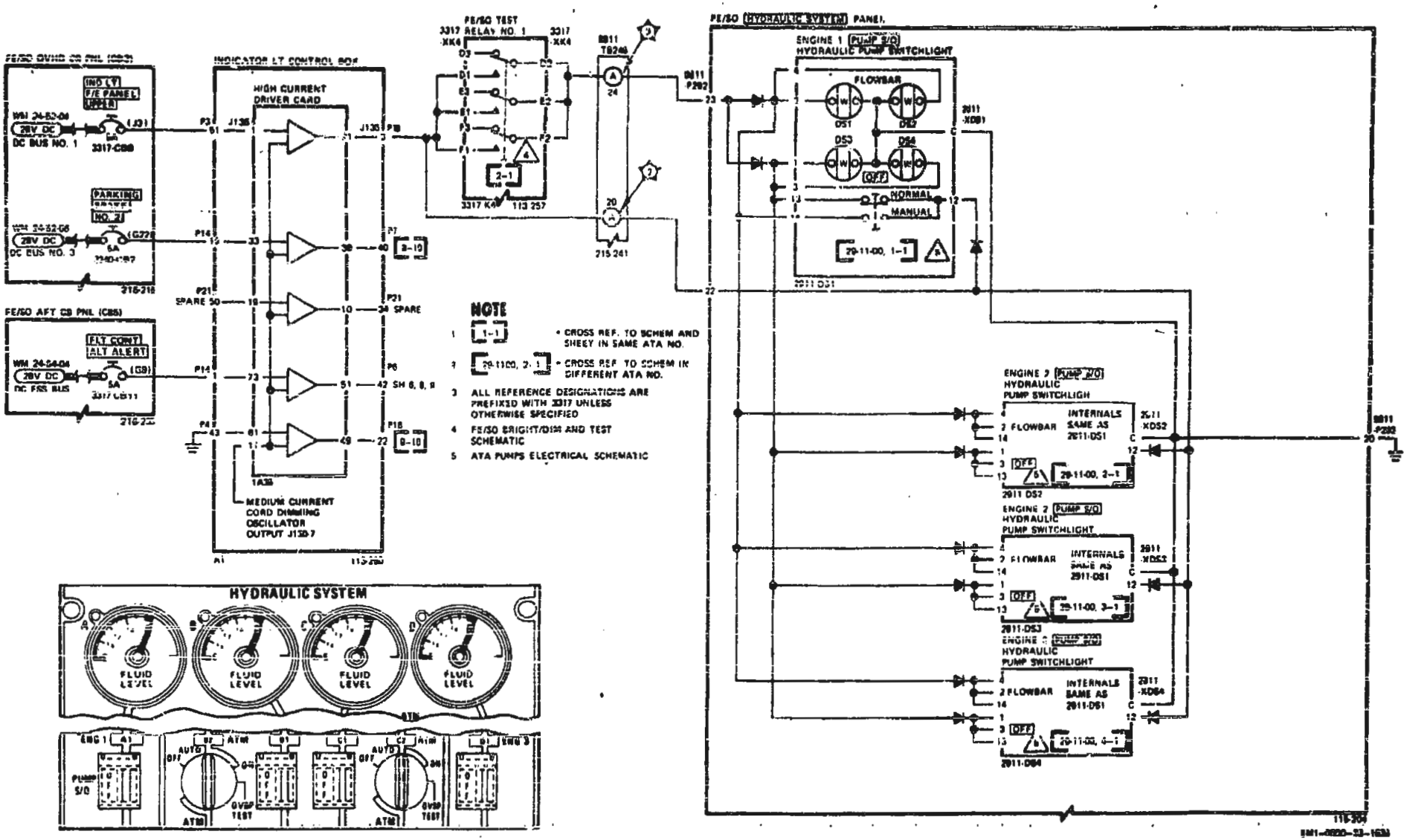

FE/SO OVHD CB PNL (CB2)
INDICATOR LT CONTROL BOX
HIGH CURRENT DRIVER CARD
3317 FE/SO TEST RLY NO. 1
BRAKE TEMP PANEL
1F-2F SWITCHLIGHT
3F-4F SWITCHLIGHT
1R-2R SWITCHLIGHT
3R-4R SWITCHLIGHT
INTERNALS SAME AS 3245-S1
HIGH TEMP IND
OVERHEAT IND
FE/SO AFT CB PNL (CB3)
FE/SO OVHD CB PNL (CB2)
MEDIUM CURRENT DIMMING OSCILLATOR OUTPUT J130-7
BRAKE TEMP
HIGH TEMP
OVER HEAT
LEFT GEAR
RIGHT GEAR
TEST
NOTE
1 1-1 · CROSS REF TO SCHEM AND SHEET IN SAME ATA NO
2 32-45-00, 1-1 · CROSS REF TO SCHEM IN DIFFERENT ATA NO
3 ALL REF DESIGNATIONS ARE PREFIXED WITH 3317 UNLESS OTHERWISE SPECIFIED

Indicator Bright/Dim and Test - Card 1A35 Schematic
SCHEM 9 (Sheet 11)


FE/SO OVHD CB PNL (CB2)
INDICATOR LT CONTROL BOX
HIGH CURRENT DRIVER CARD
FE/SO TEST RELAY NO. 1
FE/SO HYDRAULIC SYSTEM PANEL
ENGINE 1 PUMP S/O HYDRAULIC PUMP SWITCHLIGHT
FLOWBAR
NORMAL
MANUAL
FE/SO AFT CB PNL (CB5)
ENGINE 2 PUMP S/O HYDRAULIC PUMP SWITCHLIGHT
ENGINE 3 PUMP S/O HYDRAULIC PUMP SWITCHLIGHT
INTERNALS SAME AS 2911-DS1
MEDIUM CURRENT CORD DIMMING OSCILLATOR
NOTE
1 CROSS REF. TO SCHEM AND SHEET IN SAME ATA NO.
2 CROSS REF. TO SCHEM IN DIFFERENT ATA NO.
3 ALL REFERENCE DESIGNATIONS ARE PREFIXED WITH 3317 UNLESS OTHERWISE SPECIFIED
4 FE/SO BRIGHT/DIM AND TEST SCHEMATIC
5 ATA PUMPS ELECTRICAL SCHEMATIC
HYDRAULIC SYSTEM
FLUID LEVEL
PUMP S/O
OVHT TEST

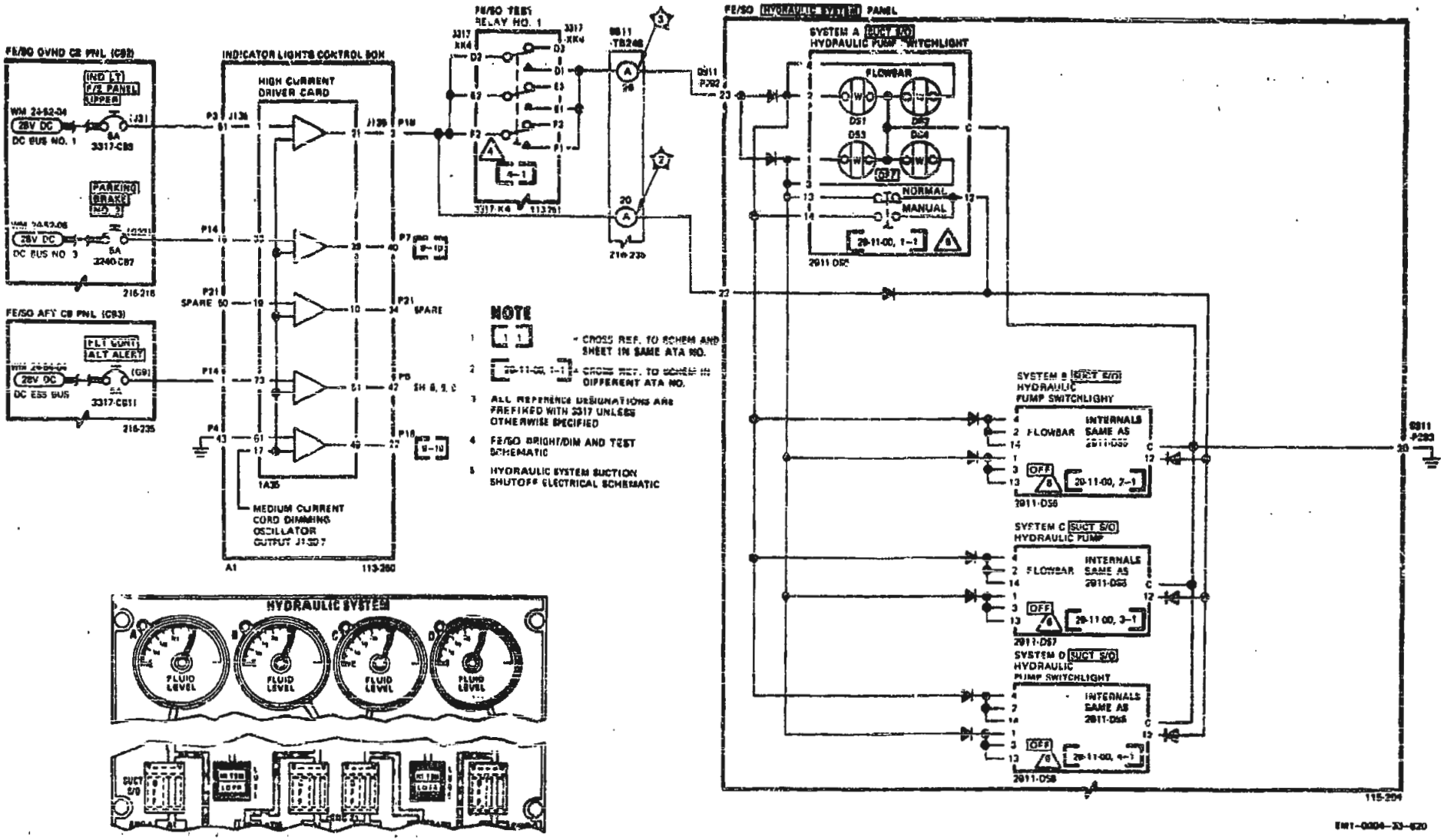
Indicator Bright/Dim and Test - Card 1A35 Schematic
SCHEM 9 (Sheet 12)

R EFFECTIVITY: 001-032
R
007B

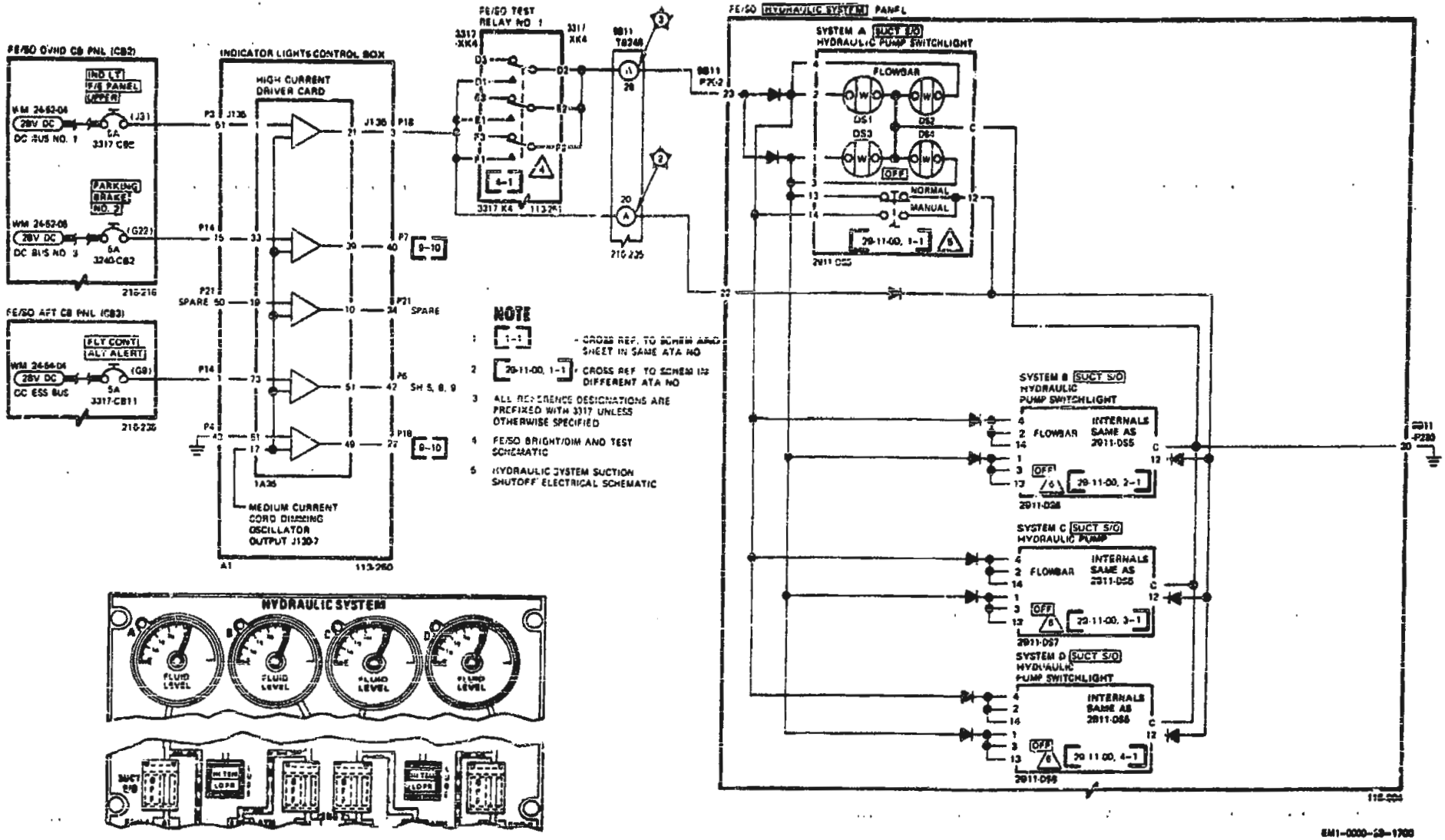

FE/SO OVHD CB PNL (CB2)
INDICATOR LT CONTROL BOX
HIGH CURRENT DRIVER CARD
FE/SO TEST
3317 RELAY NO. 1
FE/SO HYDRAULIC SYSTEM PANEL
ENGINE 1 PUMP S/O HYDRAULIC PUMP SWITCHLIGHT
FLOWBAR
NORMAL
MANUAL
OFF
ENGINE 2 PUMP S/O HYDRAULIC PUMP SWITCHLIGHT
ENGINE 3 PUMP S/O HYDRAULIC PUMP SWITCHLIGHT
INTERNALS SAME AS 2611-DS1
FE/SO AFT CB PNL (CB5)
FLT CONT
ALT ALERT
MEDIUM CURRENT CORD DIMMING OSCILLATOR OUTPUT J130-7
NOTE
1 CROSS REF. TO SCHEM AND SHEET IN SAME ATA NO.
2 CROSS REF TO SCHEM IN DIFFERENT ATA NO.
3 ALL REFERENCE DESIGNATIONS ARE PREFIXED WITH 3317 UNLESS OTHERWISE SPECIFIED
4 FE/SO BRIGHT/DIM AND TEST SCHEMATIC
5 ATA PUMPS ELECTRICAL SCHEMATIC
HYDRAULIC SYSTEM
FLUID LEVEL
PUMP S/O
OVSP TEST

Indicator Bright/Dim and Test - Card 1A35 Schematic
SCHEM 9 (Sheet 12)

R EFFECTIVITY: 033-999
R
007B


FE/SO OVHD CB PNL (CB2)
INDICATOR LIGHTS CONTROL BOX
HIGH CURRENT DRIVER CARD
FE/SO TEST RELAY NO. 1
FE/SO HYDRAULIC SYSTEM PANEL
SYSTEM A SUCT S/O HYDRAULIC PUMP SWITCHLIGHT
FLOWBAR
NORMAL
MANUAL
FE/SO AFT CB PNL (CB3)
DC BUS NO. 1
DC BUS NO 3
DC ESS BUS
MEDIUM CURRENT CORD DIMMING OSCILLATOR OUTPUT J1307
SYSTEM B SUCT S/O HYDRAULIC PUMP SWITCHLIGHT
SYSTEM C SUCT S/O HYDRAULIC PUMP
SYSTEM D SUCT S/O HYDRAULIC PUMP SWITCHLIGHT
INTERNALS SAME AS
NOTE
1 * CROSS REF. TO SCHEM AND SHEET IN SAME ATA NO.
2 CROSS REF. TO SCHEM IN DIFFERENT ATA NO.
3 ALL REFERENCE DESIGNATIONS ARE PREFIXED WITH 3317 UNLESS OTHERWISE SPECIFIED
4 FE/SO BRIGHT/DIM AND TEST SCHEMATIC
5 HYDRAULIC SYSTEM SUCTION SHUTOFF ELECTRICAL SCHEMATIC
HYDRAULIC SYSTEM
FLUID LEVEL

Indicator Bright/Dim and Test - Card 1A35 Schematic
SCHEM 9 (Sheet 13)


FE/SO OVHD CB PNL (CB2)
INDICATOR LIGHTS CONTROL BOX
HIGH CURRENT DRIVER CARD
FE/SO TEST RELAY NO 1
FE/SO HYDRAULIC SYSTEM PANEL
SYSTEM A SUCT S/O HYDRAULIC PUMP SWITCHLIGHT
FLOWBAR
NORMAL
MANUAL
OFF
FE/SO AFT CB PNL (CB3)
SPARE
MEDIUM CURRENT CORD DIMMING OSCILLATOR OUTPUT J130-7
NOTE
1 1-1 - CROSS REF. TO SCHEM AND SHEET IN SAME ATA NO
2 29-11-00, 1-1 - CROSS REF. TO SCHEM IN DIFFERENT ATA NO
3 ALL REFERENCE DESIGNATIONS ARE PREFIXED WITH 3317 UNLESS OTHERWISE SPECIFIED
4 FE/SO BRIGHT/DIM AND TEST SCHEMATIC
5 HYDRAULIC SYSTEM SUCTION SHUTOFF ELECTRICAL SCHEMATIC
SYSTEM B SUCT S/O HYDRAULIC PUMP SWITCHLIGHT
SYSTEM C SUCT S/O HYDRAULIC PUMP
SYSTEM D SUCT S/O HYDRAULIC PUMP SWITCHLIGHT
INTERNALS SAME AS 2911-DS5
HYDRAULIC SYSTEM
FLUID LEVEL

Indicator Bright/Dim and Test - Card 1A35 Schematic
SCHEM 9 (Sheet 13)

ANNUNCIATOR SYSTEM - ADJUSTMENT AND TEST

1. Referenced Procedure

21-00-00 Environmental Control System - Maintenance Practices

24-00-00 Electrical Power - Maintenance Practices

2. Adjustment/Test

A. Preparation

(1) Turn on electrical power (Ref. 24-00-00).

(2) Verify that Environmental Control System is operating (Ref. 21-00-00).

(3) On pilots overhead circuit breaker panel CB1, zone 210, verify that following circuit breakers are closed:

On aircraft 032-999,
TERRAIN-DC (B2)

RAT (H10)

On aircraft 001-031,
EMERG UNARM IND (K14)

R GEN CONTROL UNITS

GEN 1 (K15)

GEN 2 (K16)

GEN 3 (K17)

AURAL WARN

TEST & RESET (L6)

ANN RESET (L9)

LANDING GEAR - DOOR POSN IND (L13)

On Flight Engineer/Second Officers (FE/SO) overhead circuit breaker panel CB2, zone 215, verify that the following circuit breakers are closed:

INSTR COOLING (A21)

DRAINMAST - HEATER - CONT (E13)

FIRE EXT LT (F7)

BRAKE

PARKING BRAKE NO. 1 (G18)

TEMP IND - DC (G19)

PARKING BRAKE NO. 2 (G22)

F/E IND LT TEST

1(H1)

2(H2)

3(H3)

4(H4)

5(H5)

CAPT IND LT TEST

1(H8)

2(H9)

3(H10)

FLAP LOAD RELIEF IND (H-13)

IND LT

CAPT (J2)

F/E PANEL - UPPER (J3)

F/E PANEL - LOWER (J4)

AFCS WARNING

CAPT (K18)

FO (K19)

ATM PUMP CONT & IND SYS B (L13)

ATM PUMP CONT & IND SYS C (L19)

HYDRAULIC

INDICATORS - QTY (M12)

INDICATORS - PRESS (M13)

SYS A - RSVR (M14)

SYS B - RSVR (M16)

SYS C - RSVR (M18)

SYS D - RSVR (M20)

On FE/SO aft circuit breaker panel CB3, zone 215, verify that following circuit breakers are closed:

BAT PWR (B10)

APU GEN CONT UNIT (B17)

R FLT RECORDER DC (G4)

IND LT

PFCS ADS/DH (G8)

FLT CONT ALT ALERT (G9)

ELECTRIC METER SWITCH (G16)

DOOR WARN LT (H2)

AIDS/FLT RCDR-DC (H10)

LE SLAT EXTEND LT (K18)

OIL LO PRESS LIGHT (N5)

OIL LO PRESS LIGHT (N11)

OIL LO PRESS LIGHT (N17)

ENG NO. 1 - FUEL-LO PRESS (P4)

ENG NO. 2 - FUEL-LO PRESS (P10)

ENG NO. 3 - FUEL-LO PRESS (P16)

ENG VIB (R3)

ENG OUT IND (R7)

TGT WARN (R11)

CARGO TEMP

FWD MID (W9)

AFT (W10)

CABIN PRESSURE CONT - AUTO - CONT (X9)

IDG OIL - LOW PRESS (AA17)

B. BITE Test

(1) Prepare for BITE Test (Ref. Para. A).

(2) Verify that test switches on Pilots and FE/SO LIGHTS panels are in off position.

(3) In FESC, zone 113, open cover on indicator lights control box.

(4) Hold TEST/TEST BITE switch in TEST BITE position. All BITE indicators must light continuously.

(5) Release TEST/TEST BITE switch. All BITE indicators must go out.

(6) Hold TEST/TEST BITE switch in TEST position and BRT/DIM switch in BRT position. BITE indicator diodes must operate as shown in Table 501.

NOTE: All light drivers are designed to turn off without damage if a short circuit is applied to load (light) side. When this situation occurs, the driver card affected by short circuit will indicate a failure during BITE test.

(7) Momentarily depress reset switch. All BITE indicators must light continuously on blue/xxx cards (1A1, 1A3, 1A18, 1A20, 1A34, 1A36).

(8) Release all switches.

(9) Close and latch cover on indicator lights control box.

(10) Turn off electrical power (Ref. 24-00-00).

BITE Indicator Status
Table 501

	CIRCUIT CARD	REFERENCE DESIGNATION	CARD COLOR CODE	INDICATOR STATUS (TEST POSITION)	BITE MONITORS
	Caution and Warning	1A1, 1A3, 1A18, 1A20, 1A34, 1A36	Blue/xxx	Flashing for 10 seconds, then off	Driver circuit & flashing logic (flasher & dimming oscillator on card 1A16)
	Individual LT Driver	1A4 thru 1A10, 1A12 thru 1A15, 1A17, 1A22, 1A24, 1A26, thru 1A29, 1A31, 1A32, 1A33	Green	Off	Driver circuit and dimming oscillator
	High Current Driver	1A2, 1A19, 1A35	Yellow	Off	Driver circuit (dimming oscillator on card 1A30)
	Medium Current Card	1A30	White	Off	Dimming oscillators medium and high current cards (See note below)
R	Power Supply No. 1	1A16	Red/Green	Rt-On Lt-Flash (continuously)	Flasher oscillator, Caution & Warning Oscillator, 15V and 5V dc power supply
R	Power Supply No. 2	1A23	Red/Yellow	Both on continuously)	15V and 5V dc power supply

BITE Indicator Status (Cont)
Table 501

CIRCUIT CARD	REFERENCE DESIGNATION	CARD COLOR CODE	INDICATOR STATUS (TEST POSITION)	BITE MONITORS

NOTE: BITE does not monitor medium current card dimming oscillator output drivers. BITE on all 3 high current cards can indicate failure without actual high current card failure. The cause can be failure of medium current card dimming oscillator output driver even if medium current card BITE indicates no failure.

C. Operational Test

(1) Prepare for operational test (Ref. Para. A).

(2) Pilots Lamp and Timer Test

(a) On pilots LIGHTS panel, depress (latch in) WARNING/CAUTION/ADVISORY-TEST switchlight, and verify the following:

• Switchlight ON legend comes on.

• All caution and warning lights (on pilots center instrument panel, zone 210) flash for 10 seconds and then remain on.

NOTE: ENG 2 FAIL-ARMED annunciator light will not flash but will come on steady; this light, although located with caution and warning lights, is not wired to a caution and warning card.

• All pilots indicator (advisory) lights come on.

• After approximately 5 minutes all lights go out except switchlight ON legend which remains on.

(b) Depress (release) TEST switchlight; ON legend must go off.

(3) Pilots Bright/Dim Test

(a) On pilots LIGHTS panel, depress BRT/DIM switchlight to BRT; all pilots lighted indicator lights must be in bright mode.

(b) Depress BRT/DIM switchlight to DIM; all pilots dimmable indicator lights must be in dim mode.

• In general, all advisory lights are dimmable. Exceptions to this general rule are as follows:

Pilots center console VHF COMM TRANSFER panel; Transfer lights FE/SO FIRE DETECTION LOOP TEST panel: A & B (all engines) - not controlled by indicator lights control box

FE/SO WHEEL WELL FIRE TEST panel: A & B - not controlled by indicator lights control box

(4) Reset Test

(a) On pilots caution and warning (C&W) panel, located on center instrument panel, actuate the C/W ANN RESET switch; all lights on caution & warning panel which are on must go off.

NOTE: ENGINE 2 FAIL-ARMED annunciator light cannot be turned off by C/W ANN RESET switch because it is not wired to a caution and warning card; actuating pilots TEST switch, located on pilots overhead LIGHTS panel, turns off this light.

NOTE: The caution and warning lights can be reset within a few seconds after actuation.

(b) On pilots LIGHTS panel, depress TEST switchlight to ON and verify that annunciator lights come on.

(c) Depress (release) TEST switchlight; ON legend must go off. All caution and warning lights must go off (except where faults exist).

(5) Flight Engineer/Second Officers (FE/SO) Lamp and Timer Test.

R NOTE: A pilots C&W light may come on when the FE/SO
R station advisory lights are tested. This generally happens when there is already one or more faults into a C&W channel which may or may not have been reset. Do not attempt to reset C&W lights during FE/SO lights test since the test unloads the C&W circuits and may cause the lights to come on again. It must be possible to reset C&W lights when FE/SO station is out of test mode. This has been a normal occurrence

and in no way prevents proper operation of C&W system.

(a) On FE/SO LIGHTS panel, depress (latch in) WARNING/CAUTION/ADVISORY - TEST switchlight and verify the following:

- Switchlight ON legend comes on.
- All indicator (advisory) lights come on.
- After approximately 5 minutes, all lights go out except switchlight ON legend and indicators where failure signals still exist.

(b) Depress TEST switchlight; ON legend must go off.

(6) Flight Engineer/Second Officers (FE/SO) Bright/Dim Test.

(a) On FE/SO LIGHTS panel, depress BRT/DIM switchlight to BRT; all Flight Engineer/Second Officers lighted indicator lights must be in the bright mode.

(b) Depress BRT/DIM switchlight to DIM; all pilots dimmable indicator lights must be in dim mode.

NOTE: See Step (3)(b) for lights that are not dimmable.

(7) In forward electronics service center (FESC), zone 113, open cover on indicator lights control box.

(8) Hold TEST/TEST BITE switch in TEST position with BRT/DIM switch in BRT position and press Pilots and FE/SO switchlights on their respective LIGHTS panels alternately to BRT and DIM. Verify there is no change in intensity of indicator lights, except TGT, N1 and N3 lights, located on center instrument panel, must change intensity.

(9) Position BRT/DIM switch, inside the indicator lights control box to NORMAL. Verify that BRT/DIM switches, located on pilots overhead and Flight Engineer/Second Officers LIGHTS panels control indicator lights intensity.

(10) Position BRT/DIM switch, inside indicator lights control box, to DIM. All flight station indicator lights must be in dim mode except TGT, N1 and N3 lights located on Pilots center instrument panel.

(11) Position TEST/TEST BITE switch, inside indicator lights control box to NORMAL and verify that flight station indicators, except those affected by system inputs, go out.

(12) Close and latch cover on indicator lights control box.

(13) Turn off electrical power (Ref. 24-00-00).

INDICATOR LIGHTS CONTROL BOX - REMOVAL AND INSTALLATION

1. Referenced Procedures

24-00-00 Electrical Power - Maintenance Practices

33-17-00 Annunciator System - Adjustment and Test

2. Removal/Installation

R NOTE: Replacing an ILCB P/N 614F000-3 (672556-129) with an ILCB
R P/N 614J000-7 (672556-143) requires prior installation of
R an Adapter Bracket, P/N 672556-145 (Telephonics P/N
R 614B1719-1). This adapter is provided with the 614J000-7
R ILCB.

A. Removal

(1) On pilots overhead circuit breaker panel CB1, zone 210, open and tag the following circuit breakers:

On aircraft 001-031,
EMER UNARM IND (K14)

GEN CONTROL UNITS

GEN 1 (K15)

GEN 2 (K16)

GEN 3 (K17)

AURAL WARN

TEST & RESET (L6)

ANN RESET (L9)

LANDING GEAR - DOOR POSN IND (L13)

On Flight Engineer/Second Officers overhead circuit breaker panel CB2, zone 215, open and tag the following circuit breakers:

INSTR COOLING (A21)

DRAINMAST - HEATER - CONT (E13)

FIRE EXT LT (F7)

BRAKE

PARKING BRAKE NO. 1 (G18)

TEMP IND - DC (G19)

PARKING BRAKE NO. 2 (G22)

F/E IND LT TEST

1(H1)

2 (H2)

3 (H3)

4 (H4)

5 (H5)

PILOTS IND LT TEST

1 (H8)

2 (H9)

3 (H10)

FLAP LOAD RELIEF - IND (H13)

PILOTS (J2)

F/E PANEL - UPPER (J3)

F/E PANEL - LOWER (J4)

AFCS WARNING

CAPT (K18)

FO (K19)

ATM PUMP CONT & IND SYS B (L13)

ATM PUMP CONT & IND SYS C (L19)

HYDRAULIC

INDICATORS - QTY (M12)

INDICATORS - PRESS (M13)

SYS A - RSVR (M14)

SYS B - RSVR (M16)

SYS C - RSVR (M18)

SYS D - RSVR (M20)

On Flight Engineer/Second Officers aft circuit breaker panel CB3, zone 215, open and tag the following circuit breakers:

ENG NO. 2 - FUEL-LO PRESS (P10)

ENG NO. 3 - FUEL-LO PRESS (P16)

ENG VIB (R3)

ENG OUT IND (R7)

TGT WARN (R11)

CARGO TEMP

FWD MID (W9)

AFT (W10)

CABIN PRESSURE CONT - AUTO - CONT (X9)

IDG OIL - LOW PRESS (AA17)

(2) Open access door 112AB and enter forward electronic service center, zone 112. The indicator lights control box is located in zone 113 beneath the right lavatory (Ref. Fig. 401).

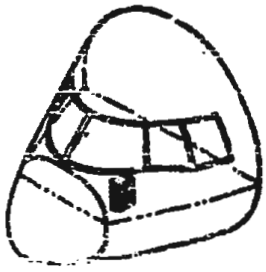
(3) Disconnect electrical connectors.

(4) Disconnect cooling air connector.

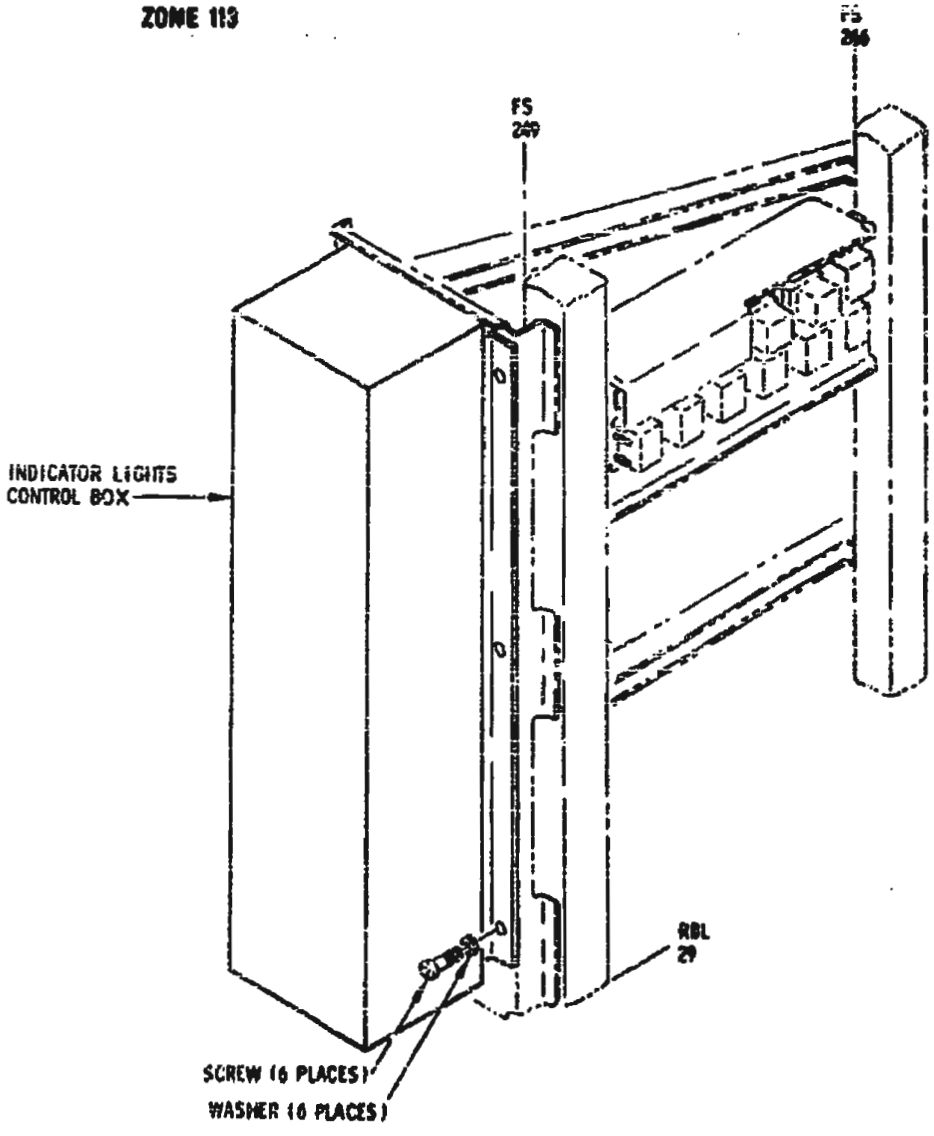
(5) Remove screws and washers and remove indicator lights control box.

B. Installation

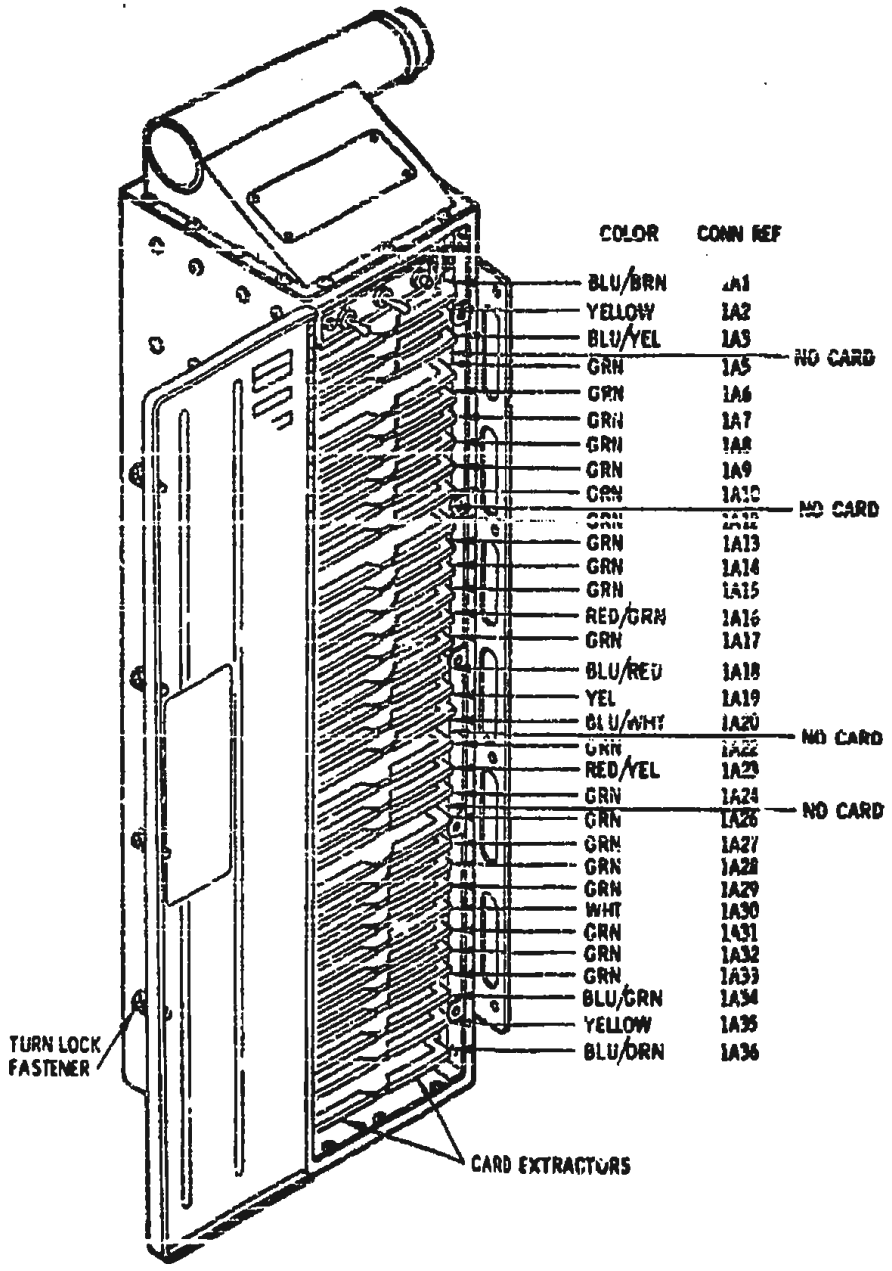
R NOTE: Replacing an ILCB, P/N 614F000-3 (672556-129) with an
R ILCB P/N 614J000-7 (672556-143) requires prior
R installation of an Adapter Bracket, P/N 672556-145
R (Telephonics P/N 614B1719-1). This adapter is
R provided with the 614J000-7 ILCB.



ZONE 113



Indicator Lights Control Box - Removal and Installation
Figure 401



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Indicator Lights Control Box - Card Removal and Installation
Figure 402

(1) Verify that circuit breakers opened in Step A(1) are open and tagged.

(2) Position indicator lights control box and secure with screws and washers.

(3) Reconnect cooling air connector.

(4) Reconnect electrical connectors.

(5) Close and secure access door 112AB.

(6) Remove tags and close circuit breakers opened in Step A(1).

(7) Turn on electrical power (Ref. 24-00-00).

(8) Perform BITE and Operational tests (Ref. 33-17-00).

(9) Remove electrical power (Ref. 24-00-00).

3. Circuit Card Replacement

A. Circuit Card

NOTE: Circuit cards may be replaced with power on.

Verify that the Warning/Caution/Advisory-Test switchlights in the flight station and the ILCB TEST/TEST BITE switchlight in the FESC are in the OFF position when removing and installing printed circuit cards in the ILCB.

When changing cards in the ILCB, verify that nylon locator keys in the card receptacle are securely in place before inserting cards. If keys are loose or missing, incorrect cards can be installed and cards will not seat properly.

(1) Open indicator lights control box.

(2) Operate card extractors and pull card from box.

C (3) Insert replacement card then simultaneously operate
C both card extractors to closed positions.

C (4) Hold TEST/TEST BITE switch to TEST BITE position. The
C BITE indicator on card must light continuously.

C (5) Release TEST/TEST BITE switch, BITE indicator must go
C out.

C (6) Close indicator lights control box.

AURAL WARNING SYSTEM - MAINTENANCE PRACTICES

R 1. Referenced Procedure

R 27-31-00 Elevator Control System - Maintenance Practices

PASSENGER COMPARTMENT LIGHTING - DESCRIPTION AND OPERATION

1. General

Passenger compartment lighting consists of the following lights (Ref. Fig. 1):

Ceiling (soffit and luminaire)

Window valance

Aisle and cross aisle

Entrance

Galley and lift

Buffet

Coat closet

Lavatory

Passenger reading

Cabin attendant reading

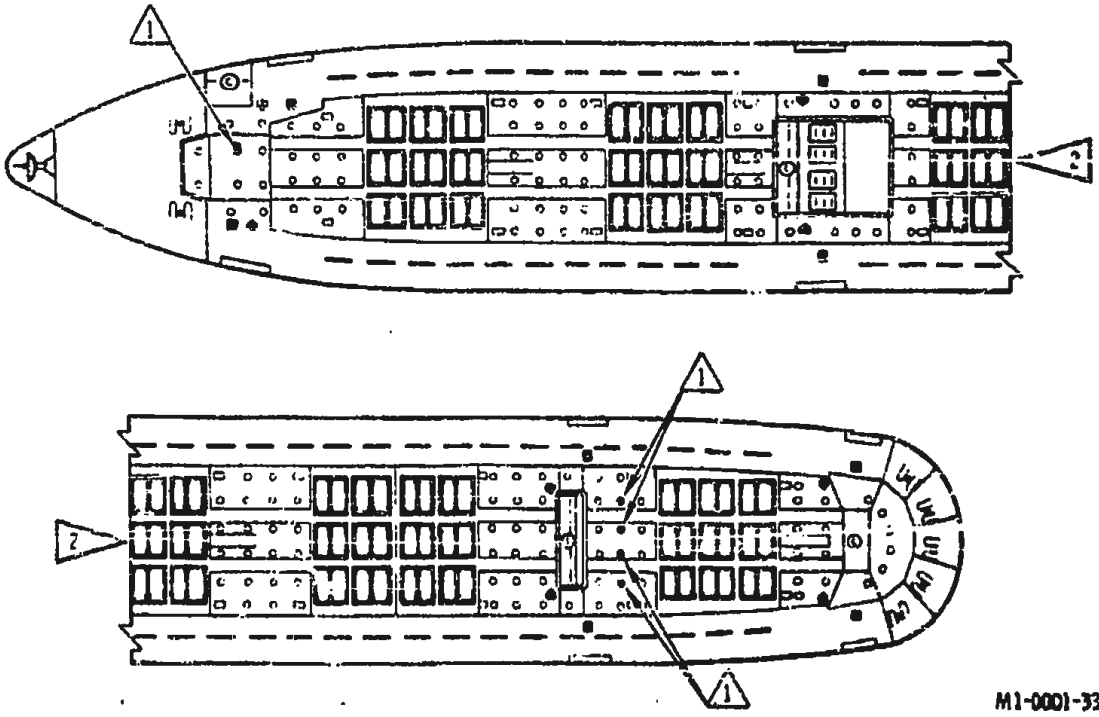
The lights which provide general illumination (ceiling, window, and aisle) are controlled at the cabin attendants panels (Ref. Fig. 2 and 3). The galley and lift lights are controlled at the galley lift panel or at the galley loading door. Other lights are individually controlled.

The passenger call system (advisory indicator lights) and the sign lighting system are also described in this section.

LEGEND		
SYMBOL	DESCRIPTION	QUANTITY
	LAVATORY	7
	SOFFIT LIGHT	146
	AISLE AND EMERGENCY LIGHT	20
	LUMINAIRE INDIRECT LIGHT	51 (1) 34 (2)
	CLOSET LIGHT	13
	CROSS AISLE LIGHT	4
	CABIN ATTENDANT WORK LIGHT	8
	ENTRY LIGHT	8
	SIDEWALL LIGHT	120

NOTE

1. SOFFIT LIGHT DEACTIVATED WHERE SATELLITE SERVICE CENTER IS INSTALLED
2. (1) AIRCRAFT 001-031
3. (2) ON AIRCRAFT 032-999 CENTER COLUMN OF LUMINAIRE LIGHTS HAS BEEN DELETED



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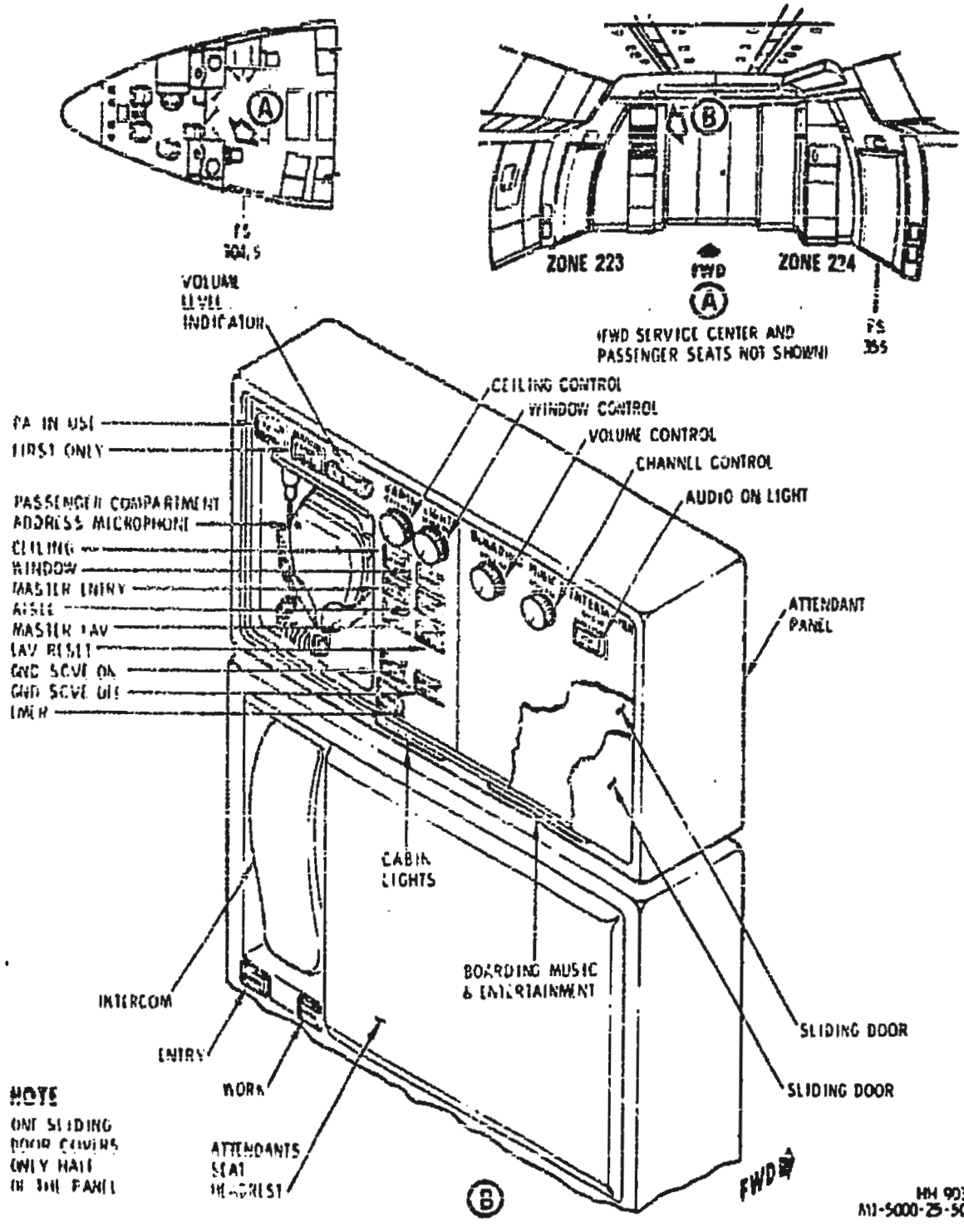
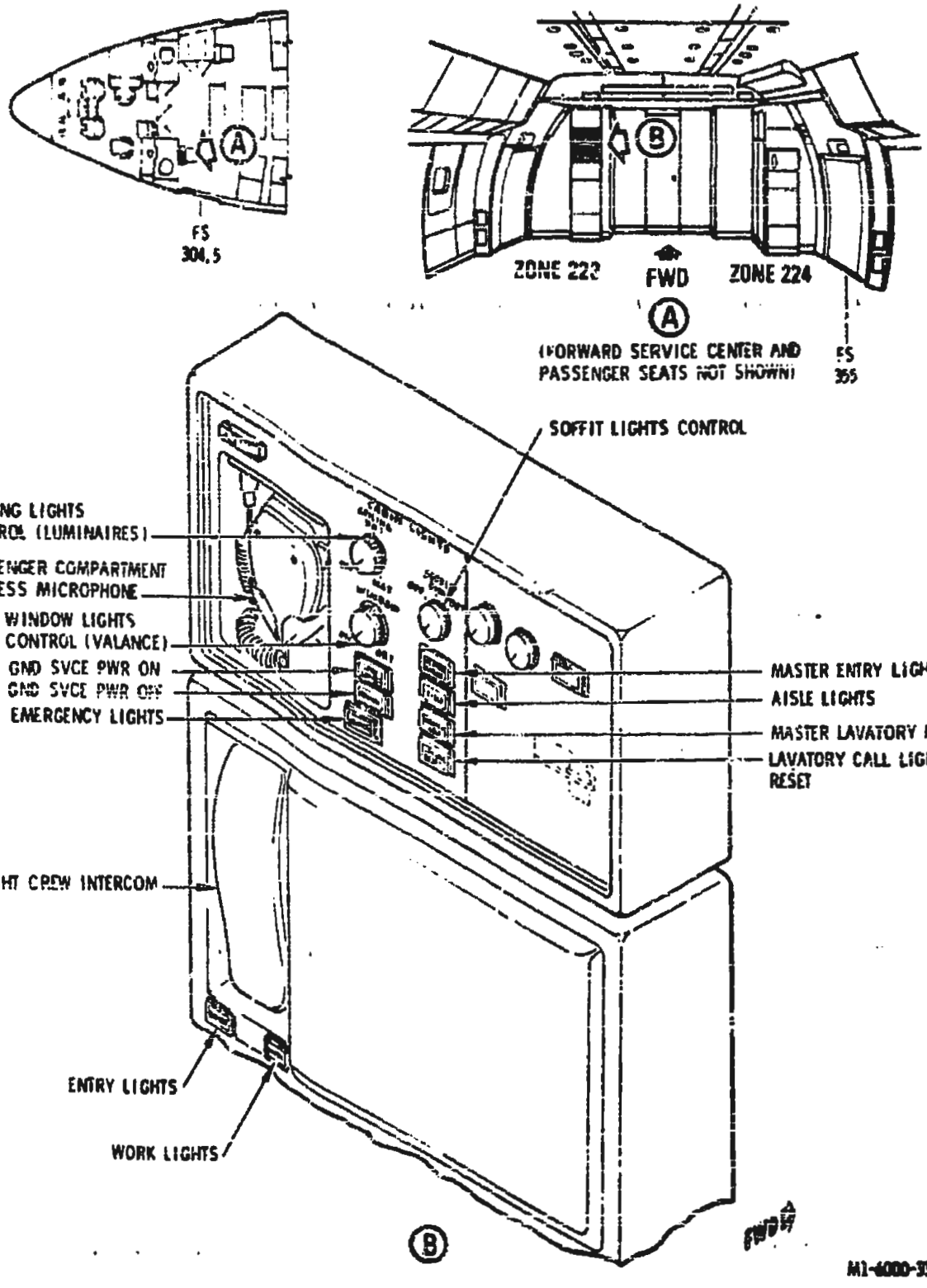
Passenger Compartment Lights
Figure 1



Forward Attendants Panel
Figure 2



R
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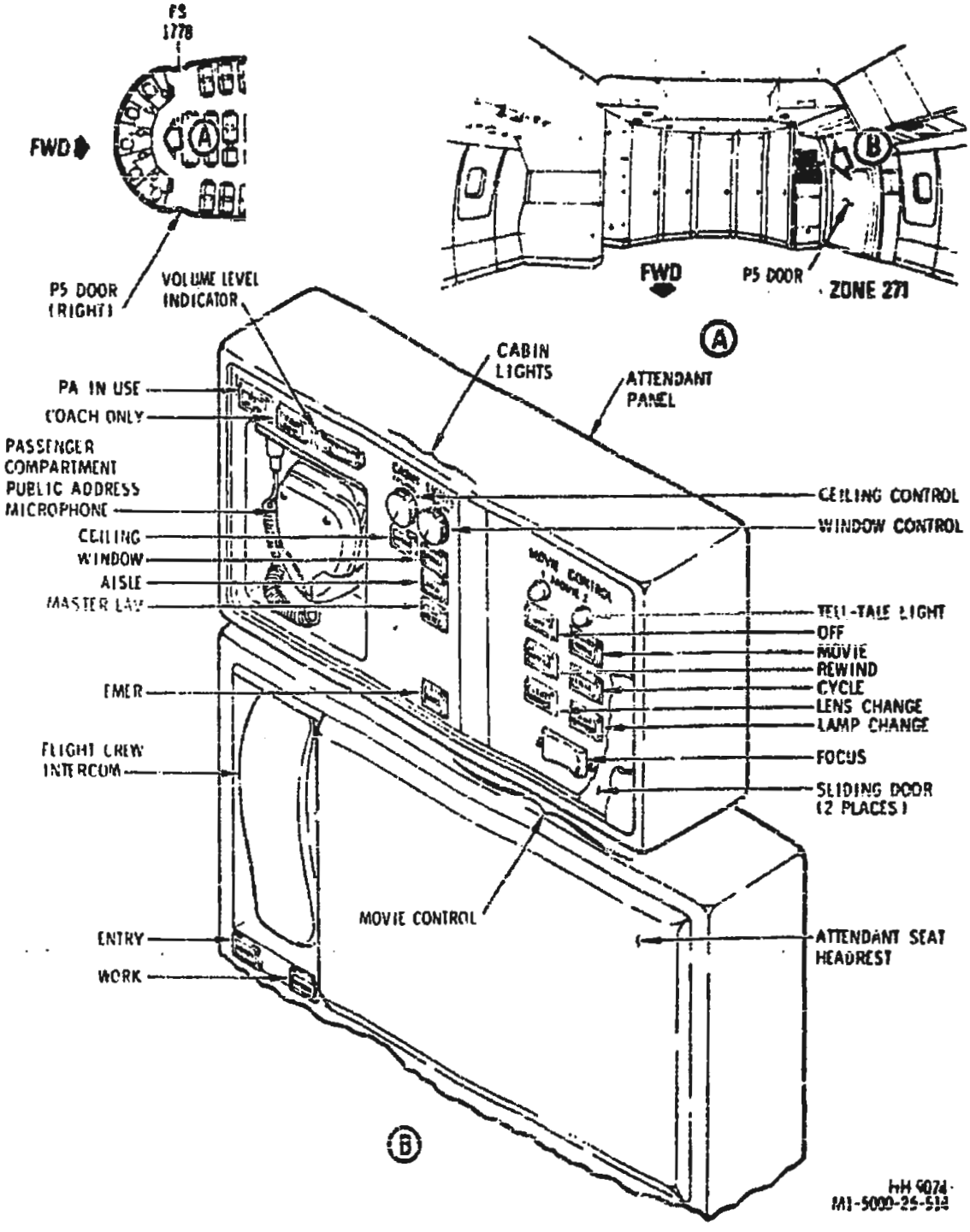
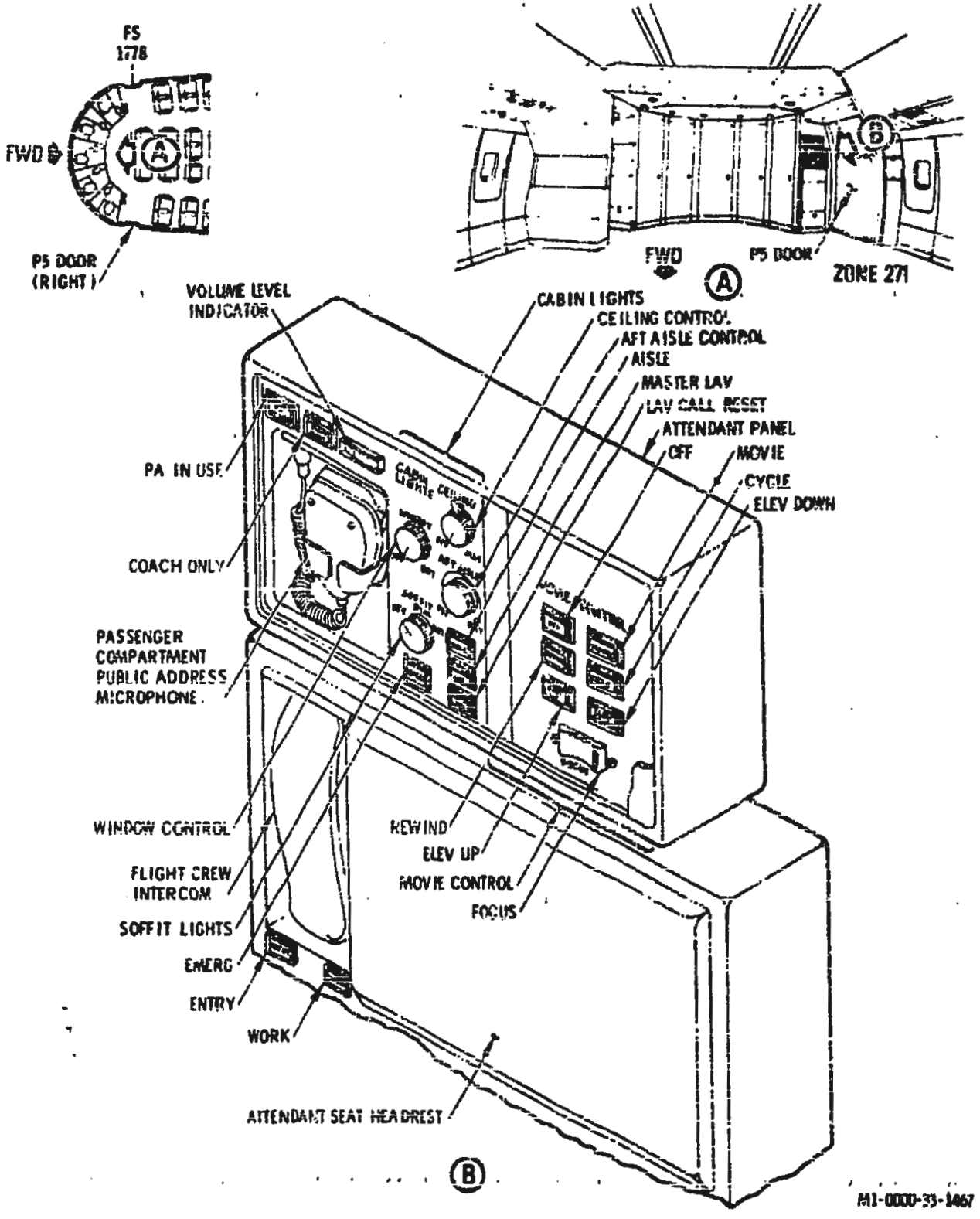
Forward Attendants Panel
Figure 2



Aft Attendants Panel
Figure 3



Aft Attendants Panel
Figure 3

AISLE, CEILING, AND BUFFET LIGHTING - DESCRIPTION AND OPERATION

1. General

The following lights are covered in this section:

Aisle lights

Cross-aisle lights

Ceiling lights - soffit and luminaire

Window valance lights

Buffet Lights

2. Aisle Lights

A. Description and Operation

R Twenty (20) incandescent aisle lights are located in the ceiling (Ref. Fig. 1). The lights are dual-purpose fixtures. The normal lamps are powered by the aircraft
R electrical system: fourteen (14) by dc bus 3, and six (6) by the dc standby bus (Ref. Fig. 2). The emergency lamps are powered by emergency power packs (Ref. 33-51-00).

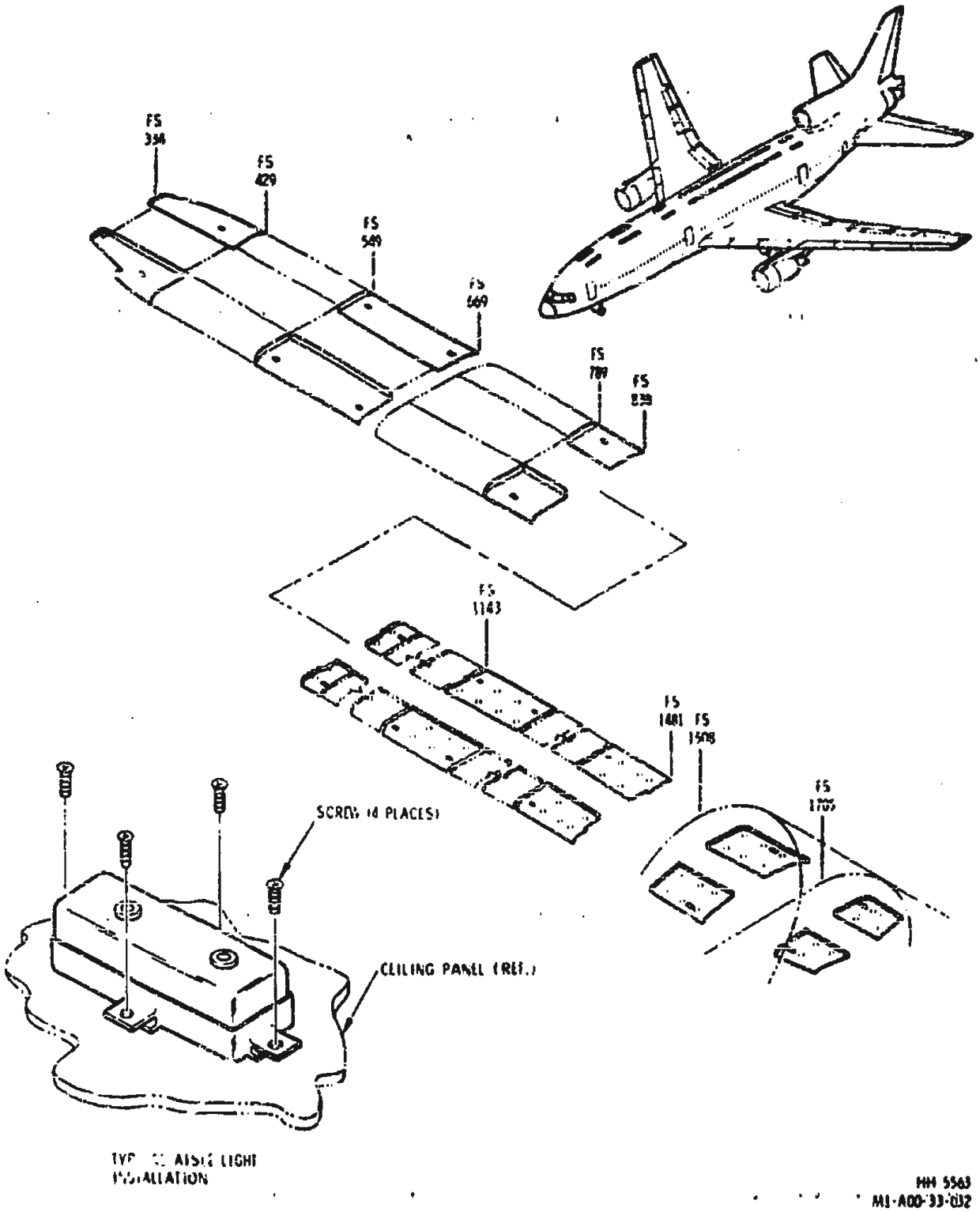
The aisle lights forward of the cross-aisle are controlled by an AISLE switchlight on the forward attendants panel, zone 220. The lights aft of the cross-aisle are controlled by an AISLE switchlight on the aft attendants panel, zone 270.

R In case of failure of normal dc power, the six (6) aisle lights energized from the dc standby bus will be powered by the aircraft battery (Ref. 24-32-00).

3. Cross-aisle Lights

A. Description and Operation

R The cross-aisle lights consist of four (4) fluorescent lights mounted in the ceiling forward of the galley lifts, zone 240, (Ref. Fig. 3). The lights are controlled by a rheostat on the galley upper lift control panel (Ref. Fig. 4). Power to the cross-aisle lights and also to the window valance lights is supplied by a 100V dc power supply located
R in the mid electrical service center, zone 137.



TYP[illegible] AISLE LIGHT INSTALLATION

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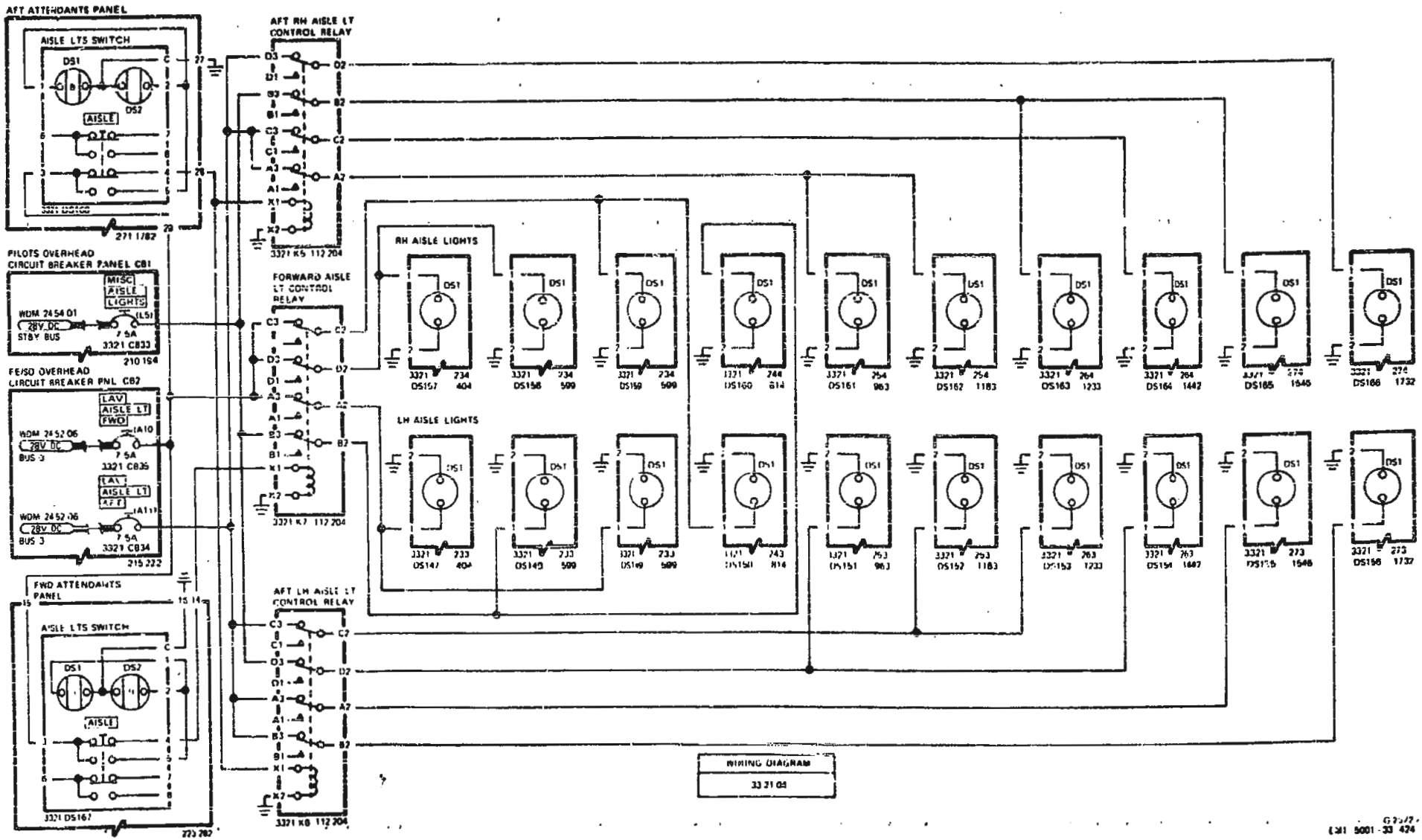
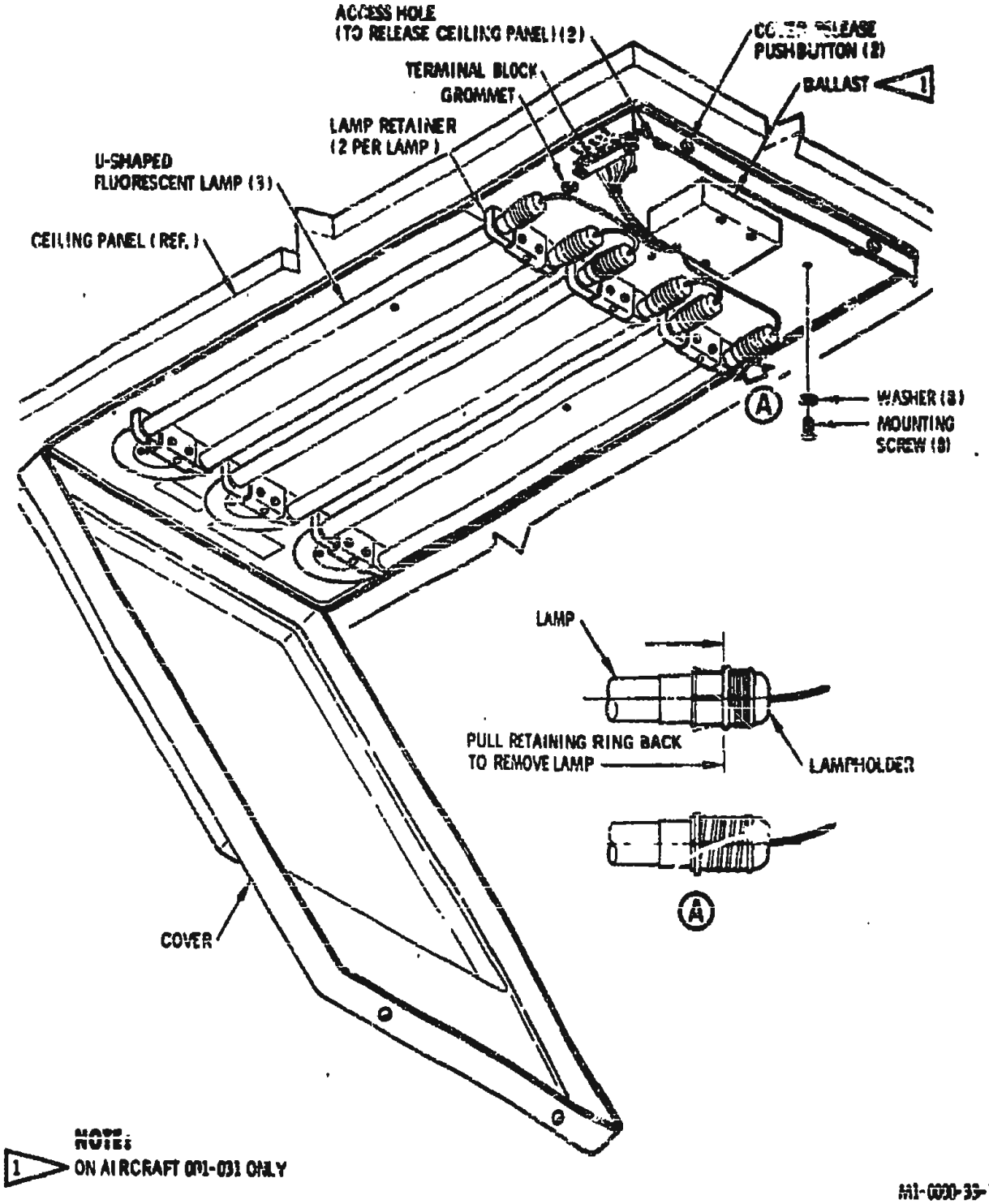
Aisle Lights
Figure 1



Aisle Lights Schematic
Figure 2

EFFECTIVITY: 001-031



Cross-aisle Light
Figure 3

4. Ceiling Lights

A. Description

The ceiling lights consist of soffit and luminaire lights arranged in alternate groups (Ref. Fig. 5 and 6). Both the soffit and luminaire lights forward of the class divider are controlled simultaneously by the CEILING switchlight and rheostat on the forward attendants panel; the lights aft of the class divider are similarly controlled from the aft attendants panel. Conversion switches (Ref. Fig. 7) are provided above the lift control panel, zone 240, to switch control of some or all aft lights to the forward attendants panel when the class divider is relocated or removed.

B. Soffit Light Operation

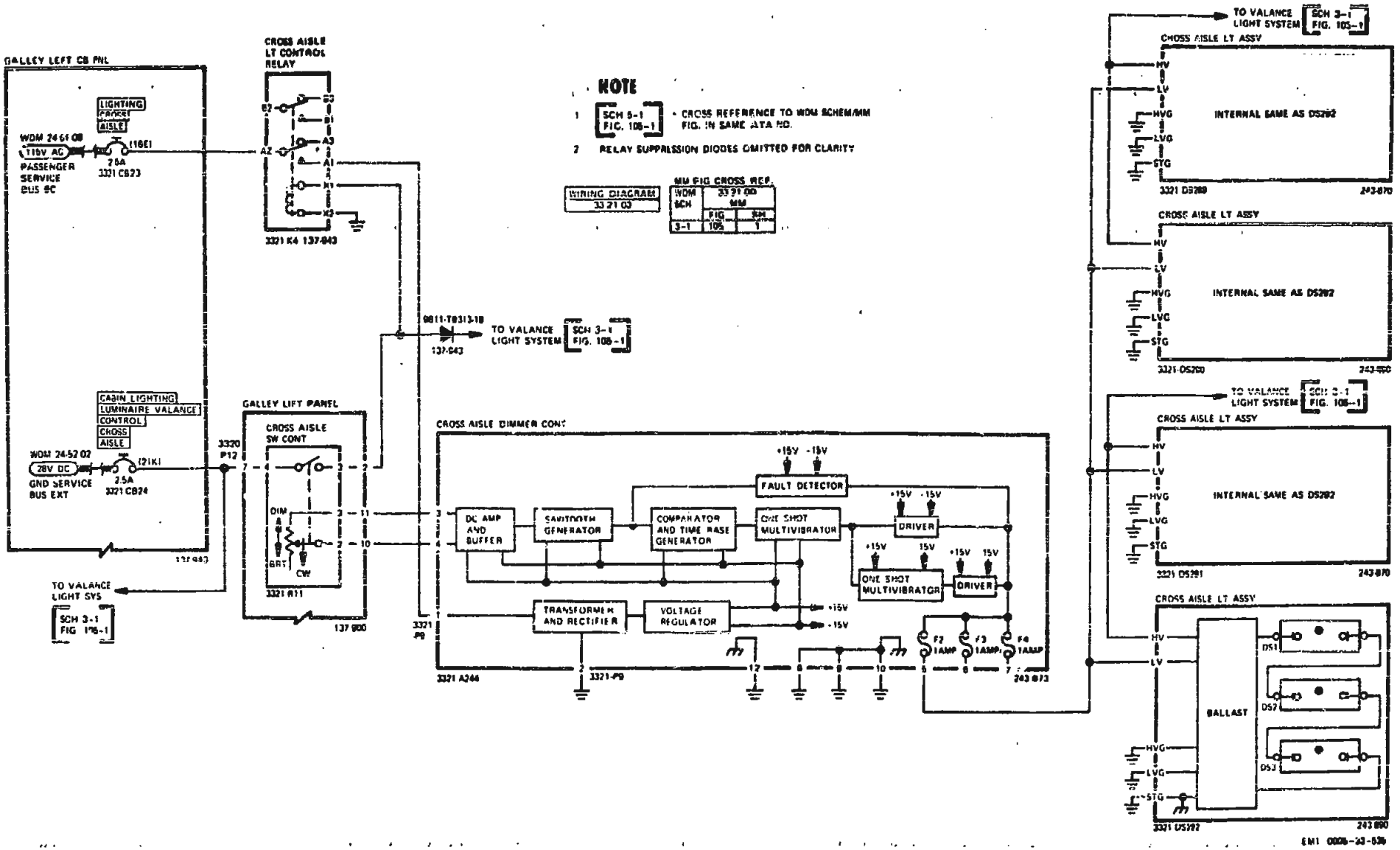
The soffit lights are powered by 115V ac passenger service bus 1L (Ref. Fig. 8). Each light incorporates a 115/26V ac stepdown transformer. When the CEILING switchlights are depressed, the forward and aft soffit light relays connect power to the forward and aft dimming controllers. The position of the SOFFIT LTS CONVERSION SW determines the lights to be controlled from each attendants panel. When all lights are to be controlled from the forward attendants panel, a conversion relay and a dimming control source select relay transfer forward attendant panel control to the aft dimming controller. In this condition, the aft dimming controller controls all soffit lights.

C C C C NOTE: The two soffit lights above the foward lavatory aisle and the four soffit lights above the aft lavatory aisle are connected to their respective lavatory light circuit and are not dimmableE.

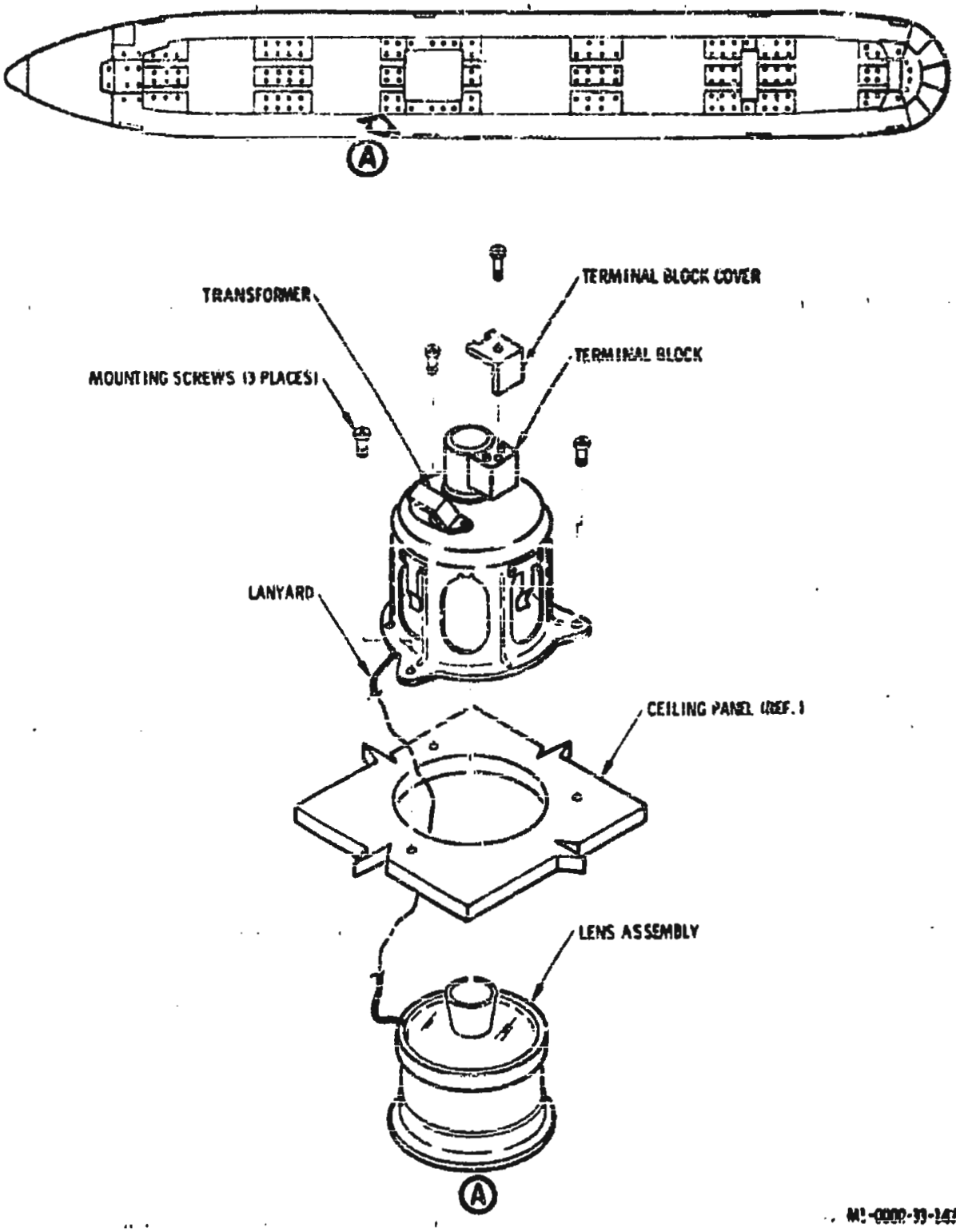
C. Luminaire Light Operation

The luminaire lights are powered by 115V ac passenger service bus 1R through forward and aft 100V dc power supplies located in the mid electrical service center, zone 137 (Ref. Fig. 9). Distribution and control relays connect power to the dc power supplies and to dimmer control units when the CEILING switchlights are depressed. The position of the OVHD LUMINAIRES CONVERSION SW determines the lights to be controlled from each attendants panel.

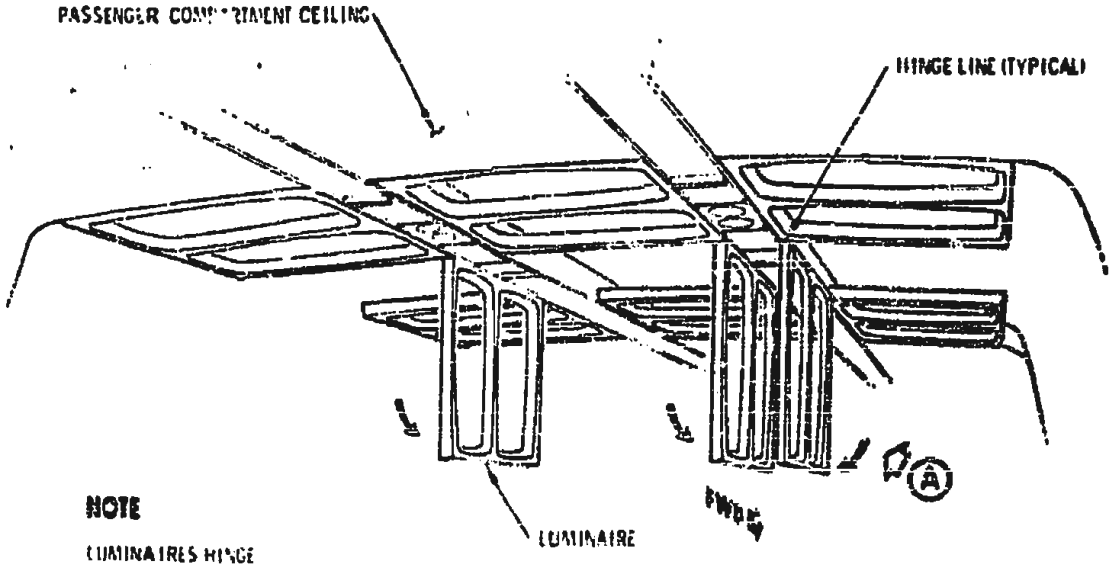
When all lights are to be controlled from the forward attendants panel, conversion control relays connect the aft dimmer control unit to the forward attendants panel. Both forward and aft dimmer control units are then controlled from the forward attendants panel.



Cross-aisle Lights Schematic
Figure 4



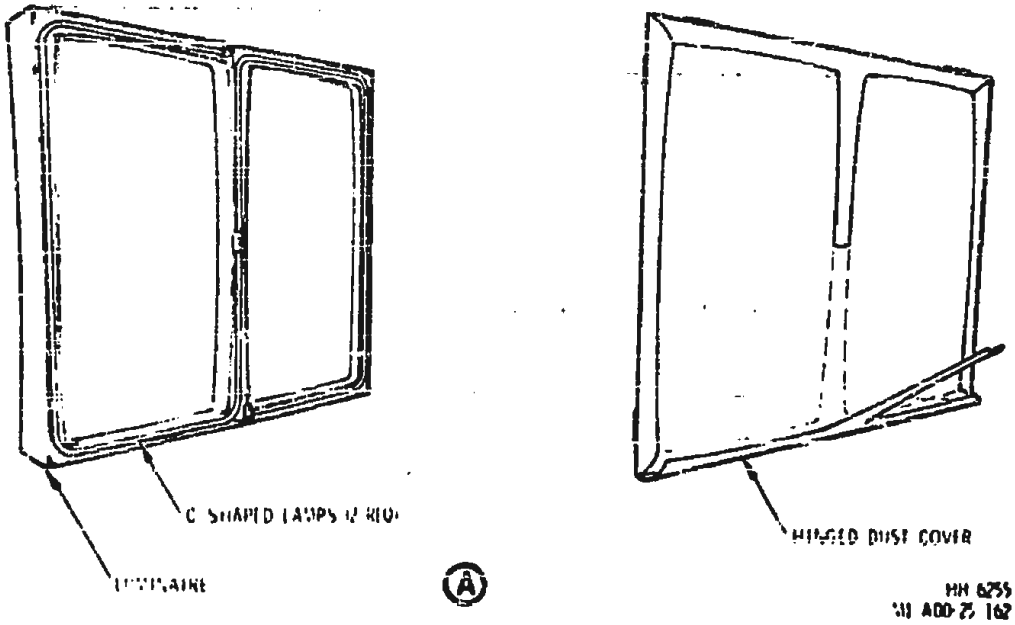
Soffit Lights
Figure 5



NOTE

LUMINAIRES HINGE DOWNWARD TO SERVICE LAMPS

TYPICAL LUMINAIRE LOCATION



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Luminaire Lights
Figure 6

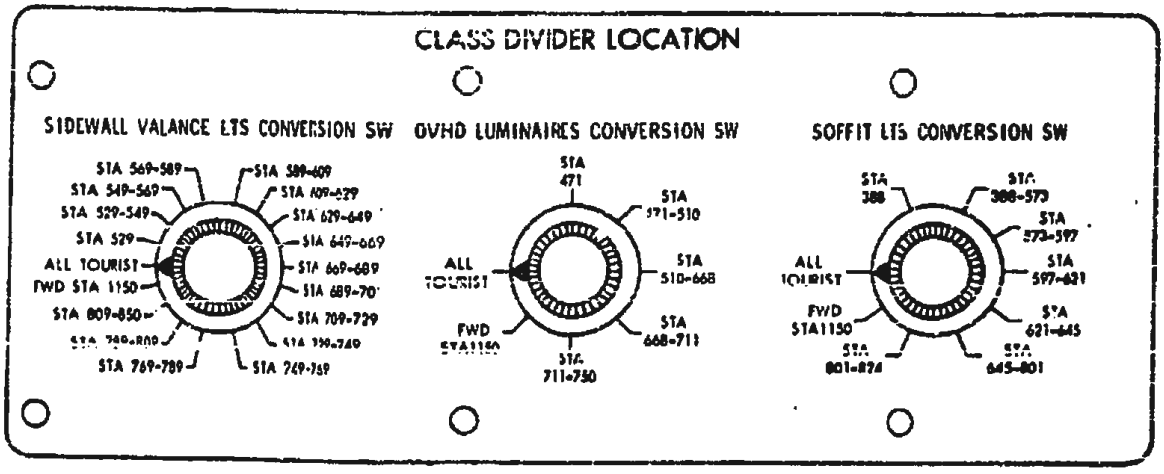
5. Window Valance Lights

A. Description

The window valance (sidewall) lights form a continuous line of fluorescent light above the windows (Ref. Fig. 10). The lights forward of the class divider are controlled from the forward attendants panel; those aft of the class divider are controlled from the aft attendants panel. A conversion switch located in the ceiling above the lift control panel, zone 240, permits switching control of some or all aft lights to the forward attendants panel when the class divider is relocated or removed.

B. Operation

Power to the window valance lights and also the cross-aisle lights is supplied by a 100V dc power supply located in the mid electrical service center, zone 137, (Ref. Fig. 11). When the WINDOW switchlights on the attendants panels are depressed, switching relays connect power to the dc power supply and to the dimming control units. The position of the SIDEWALL VALANCE LTS CONVERSION SW determines the lights to be controlled from each attendants panel.



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R R Conversion Control Switches
Figure 7

When all lights are to be controlled from the forward attendants panel, control and conversion relays connect the aft dimming control unit to the forward attendants panel. Both forward and aft dimmer control units are then controlled from the forward attendants panel.

6. Buffet Lights

A. Description and Operation

Fluorescent lights are incorporated in buffet facilities as follows:

Forward beverage bar - two (2) lights

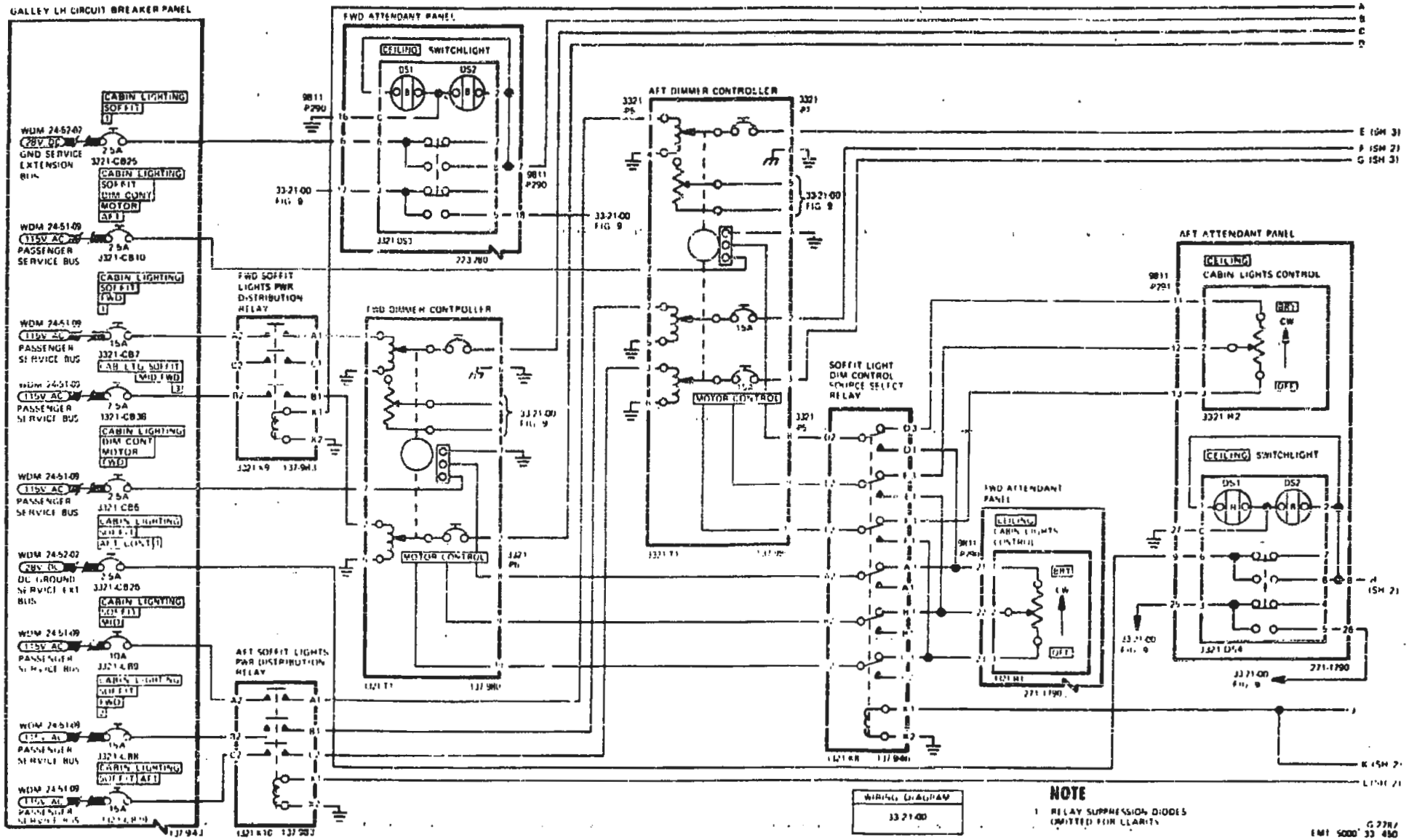
Forward service center - one (1) light

Mid service center - two (2) lights

Aft service center - five (5) lights

The forward beverage bar, forward service center, and aft service center lights are controlled by rocker-type switches with DIM, OFF, and BRT positions (Ref. Fig. 12). The mid service center lights are controlled individually by integral switches and are not dimmable.

R Wiring is also installed for the aft coffee bar light. The
R light is not installed.



R Soffit Lights Schematic
R Figure 8 (Sheet 1)

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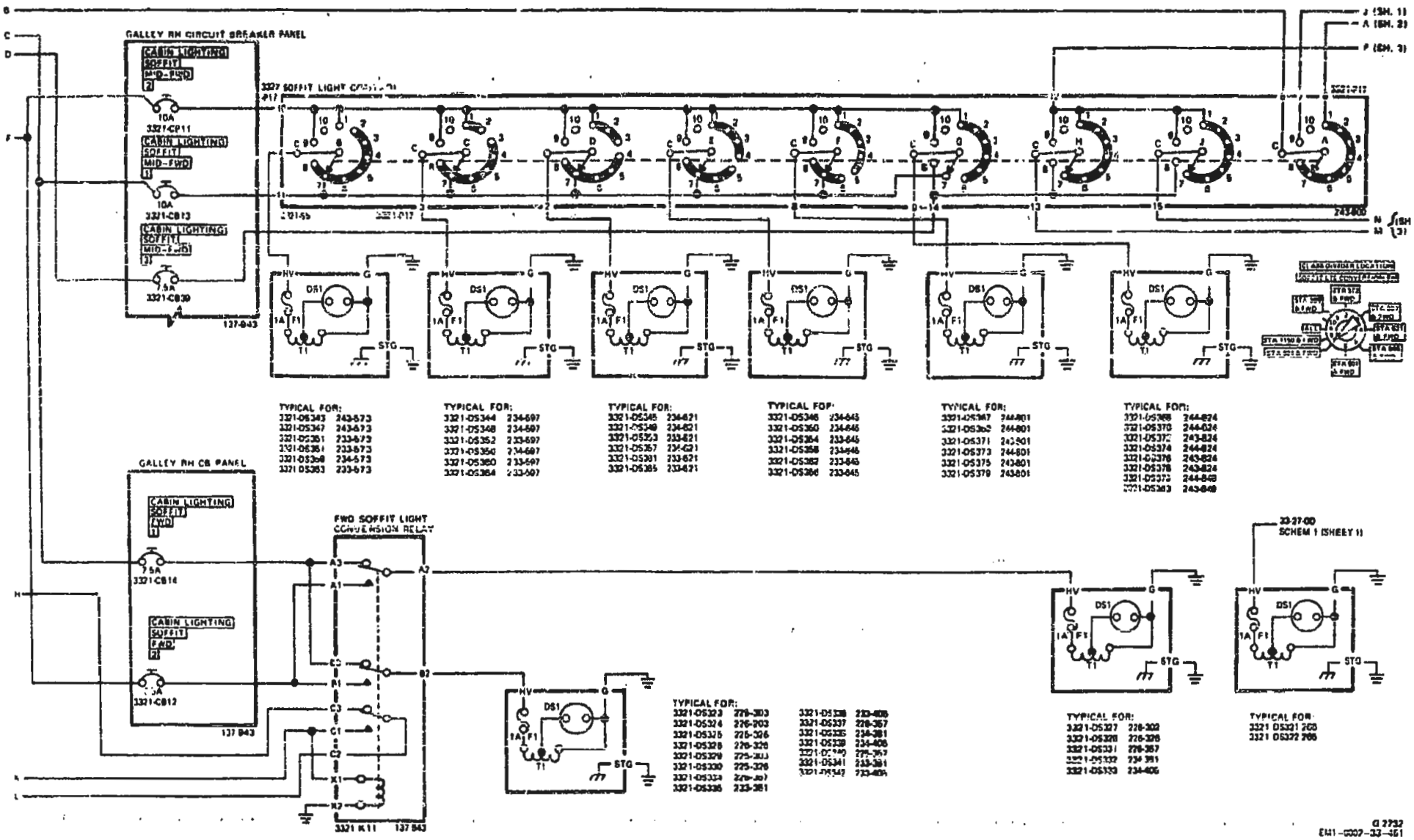
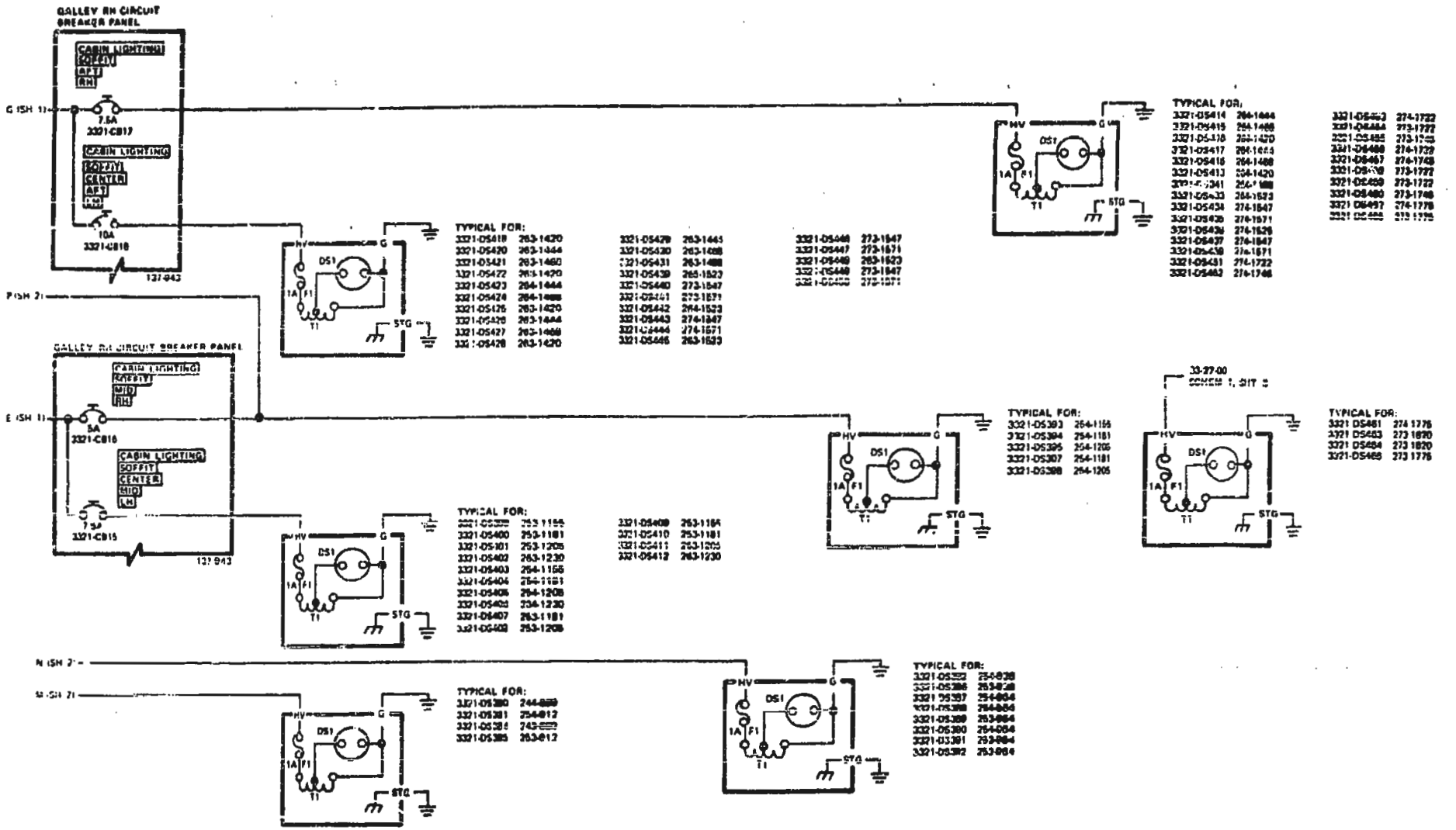


Soffit Lights Schematic
Figure 8 (Sheet 2)

EFFECTIVITY: 001-031



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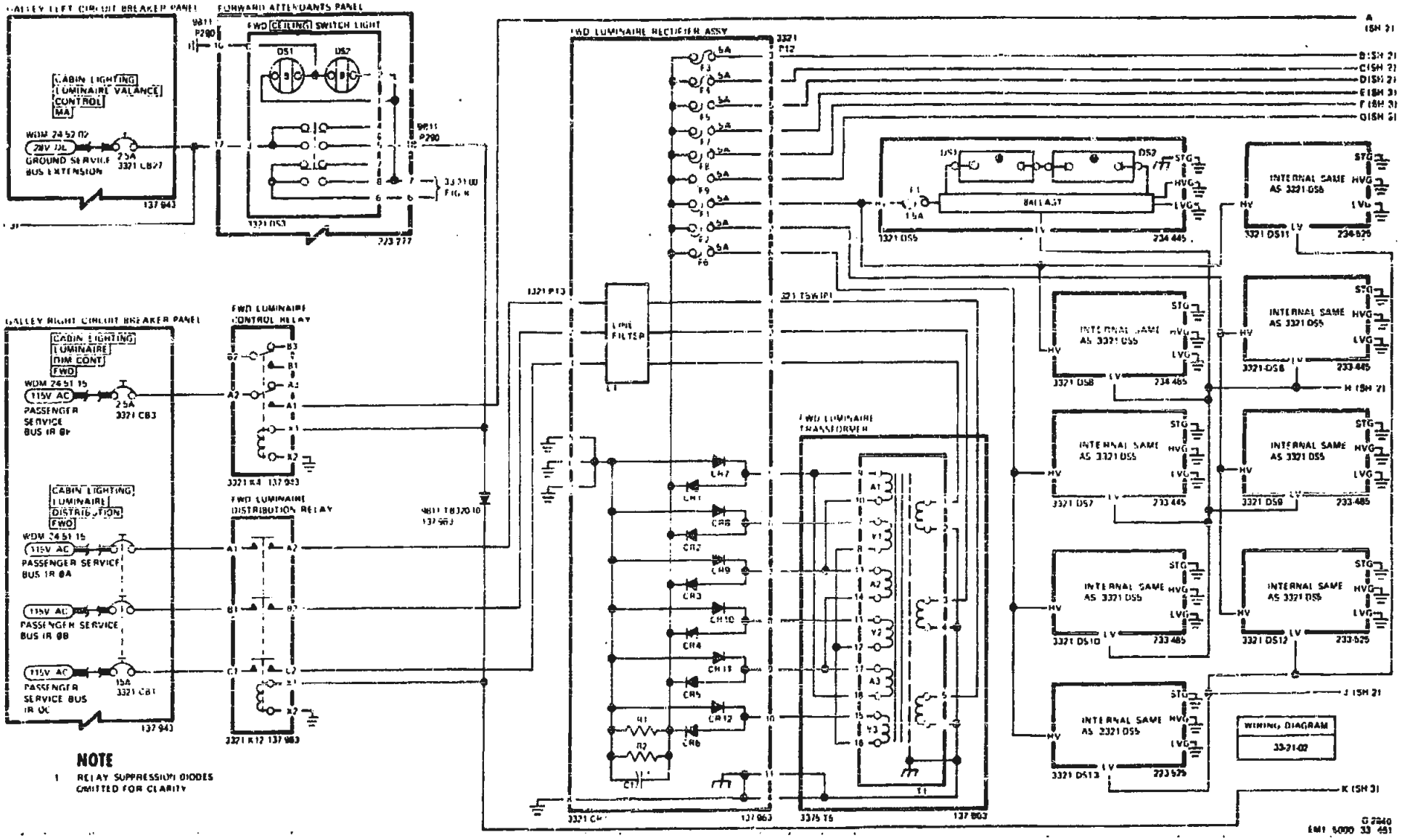
R Soffit Lights Schematic
R Figure 8 (Sheet 3)

EFFECTIVITY: 001-031



Luminaire Lights Schematic
Figure 9 (Sheet 1)

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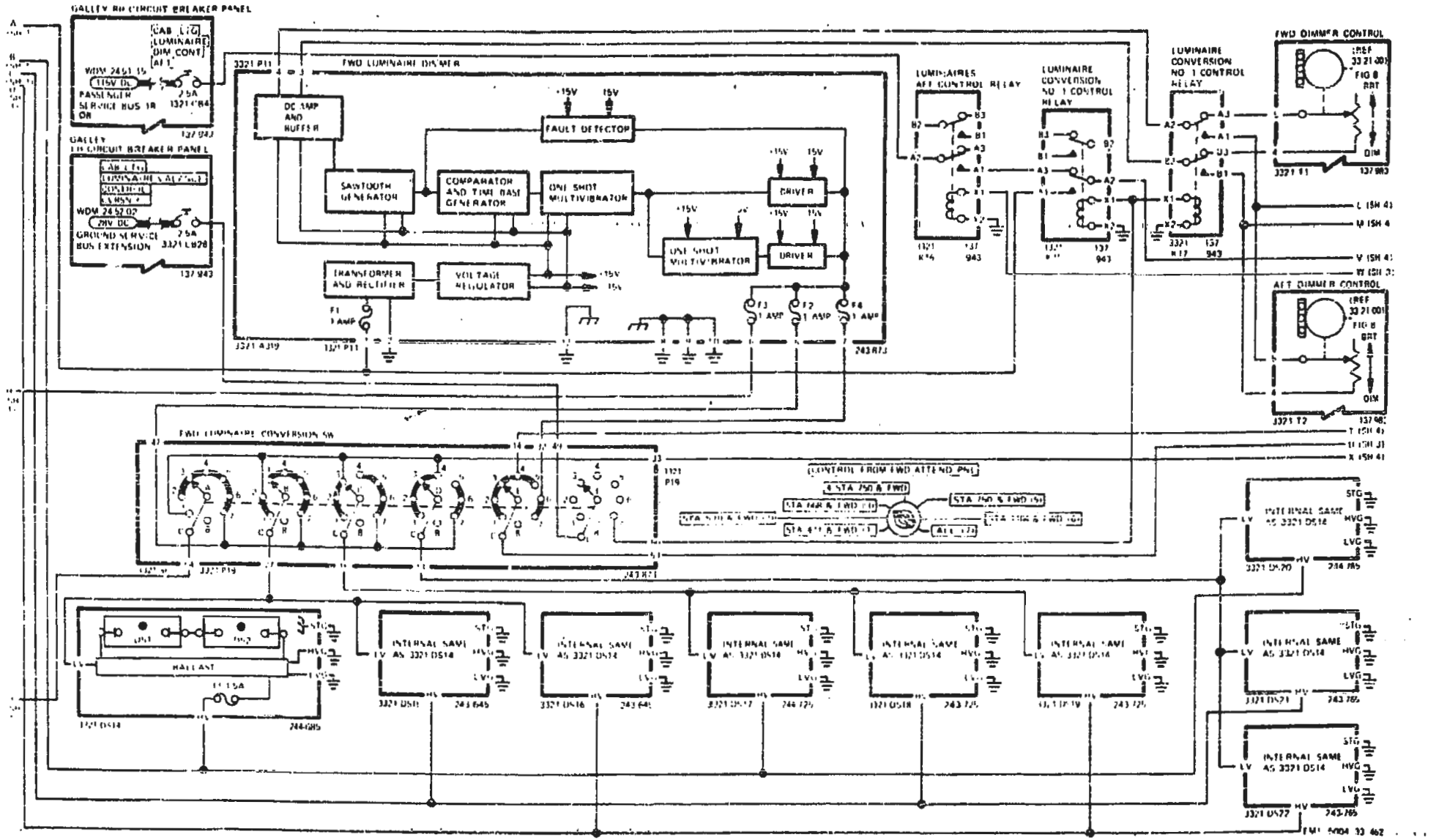
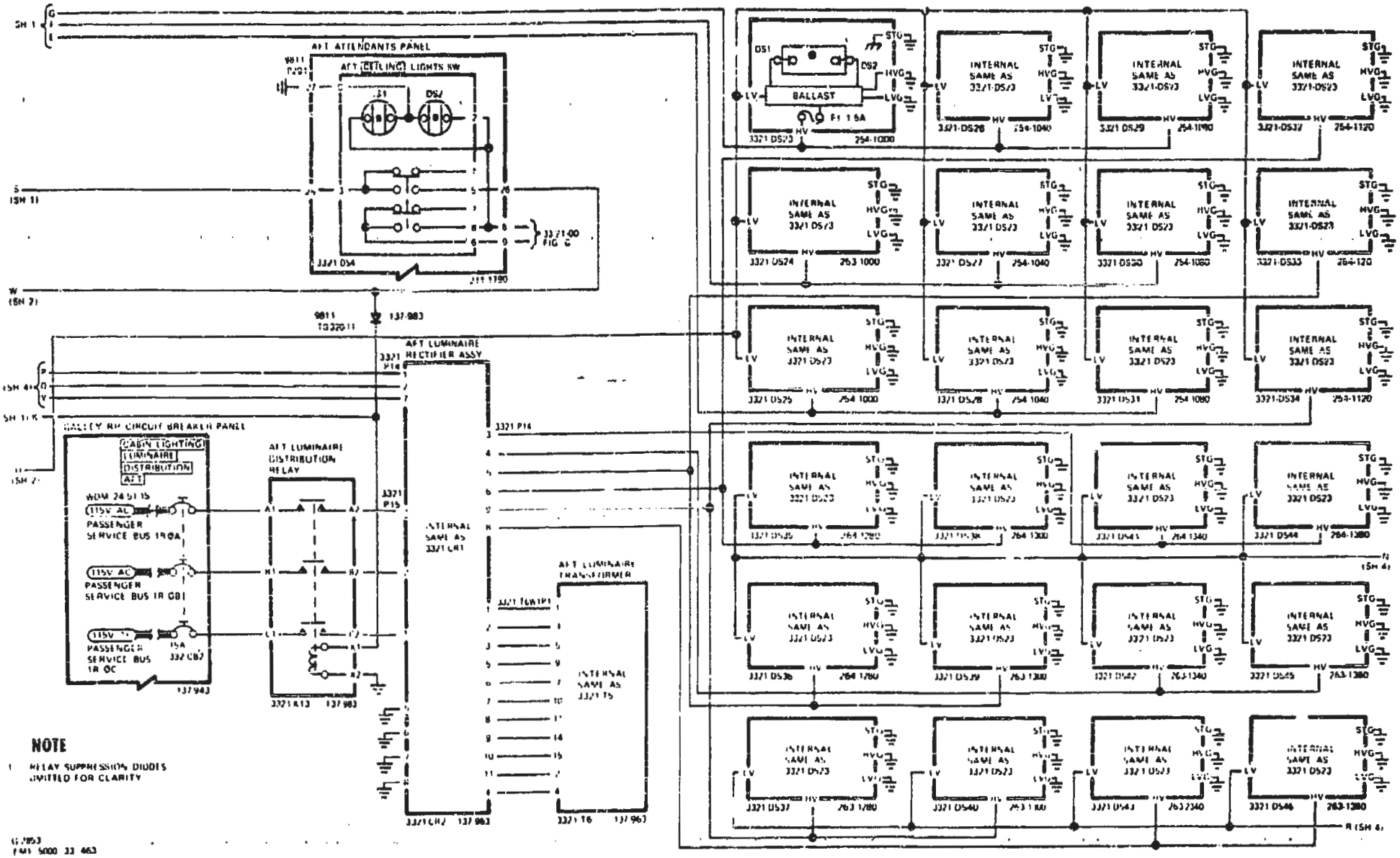


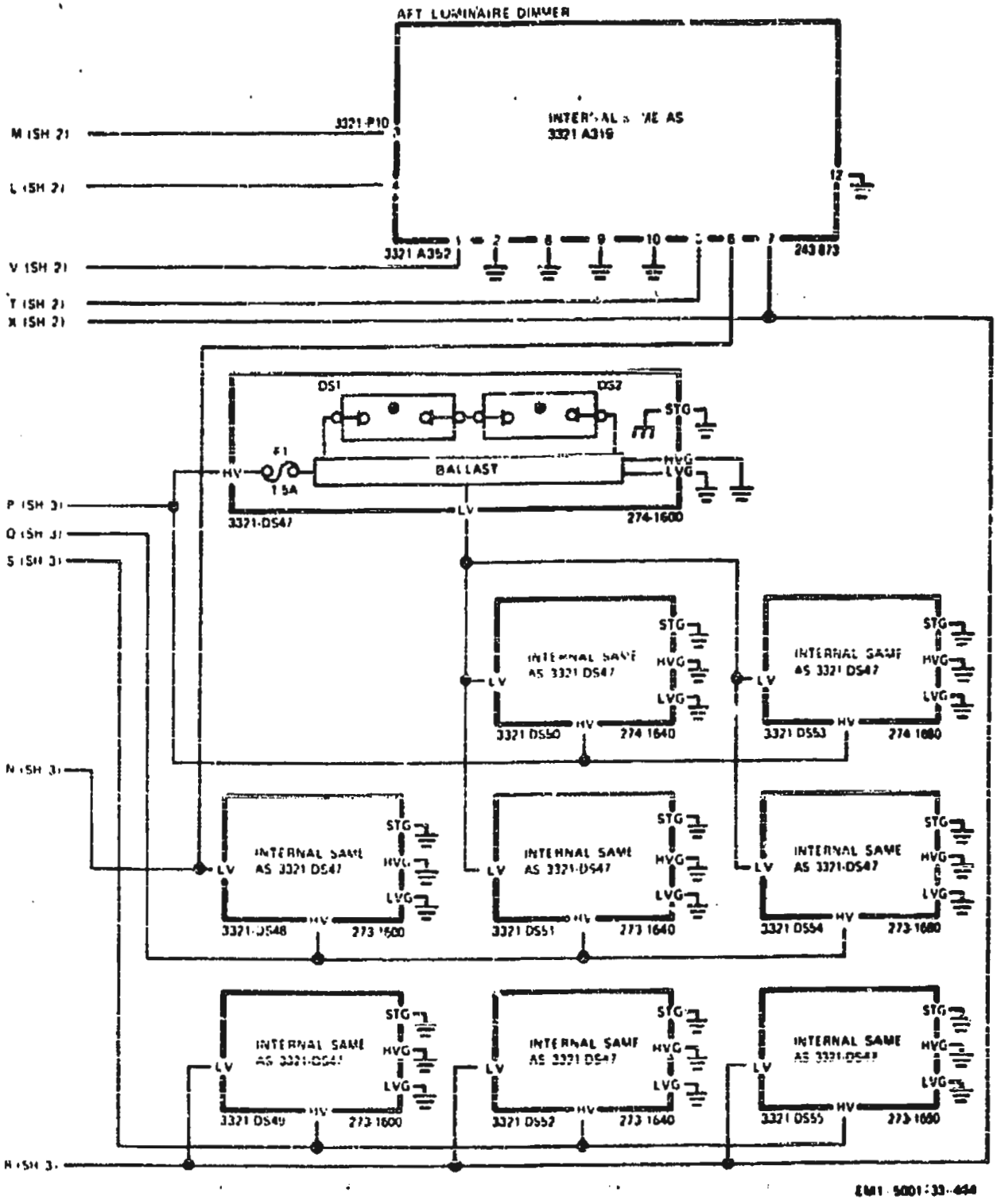
Luminaire Lights Schematic
Figure 9 (Sheet 2)

EFFECTIVITY: 001-031



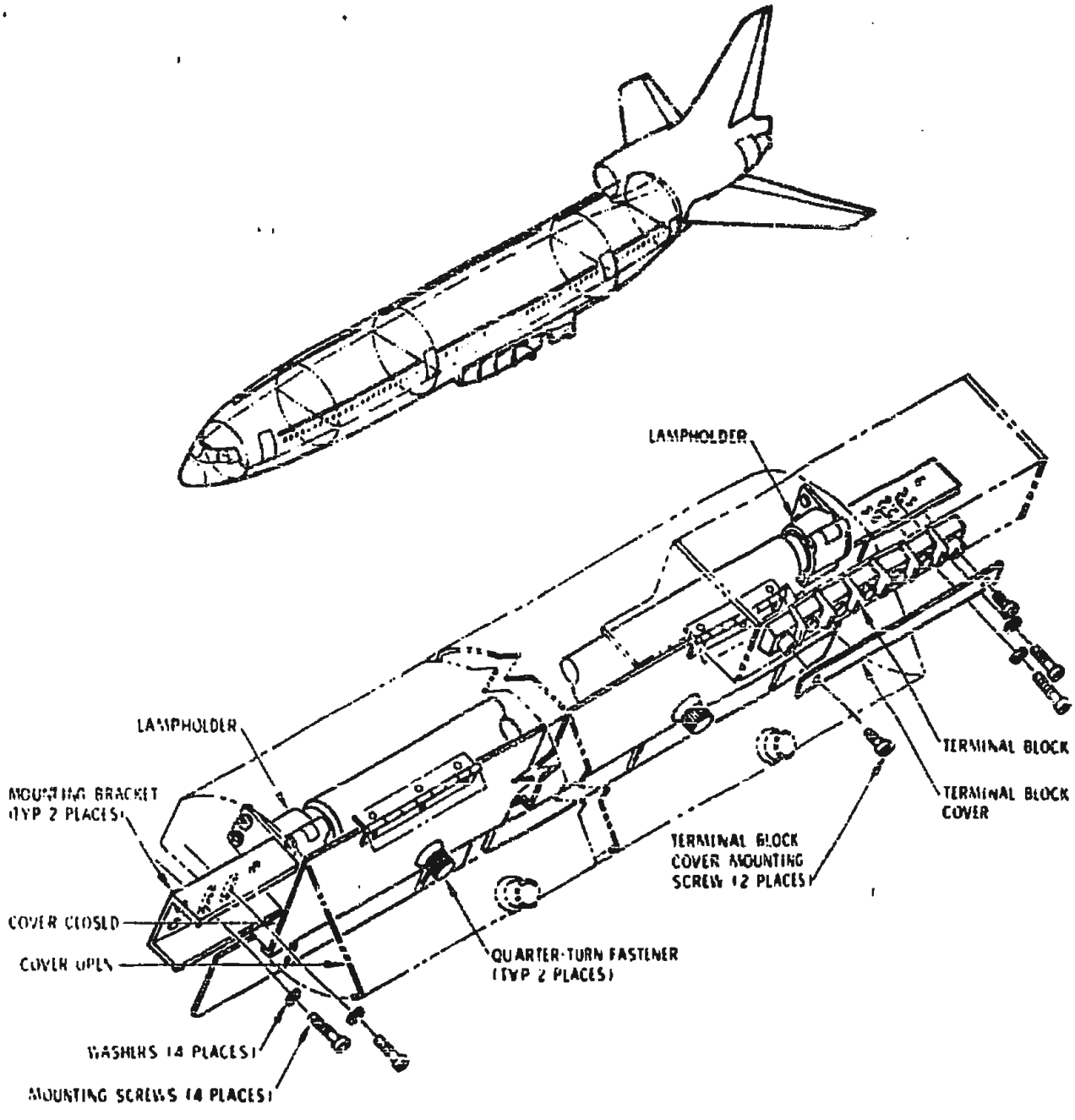
Luminaire Lights Schematic
Figure 9 (Sheet 3)

EFFECTIVITY: 001-031



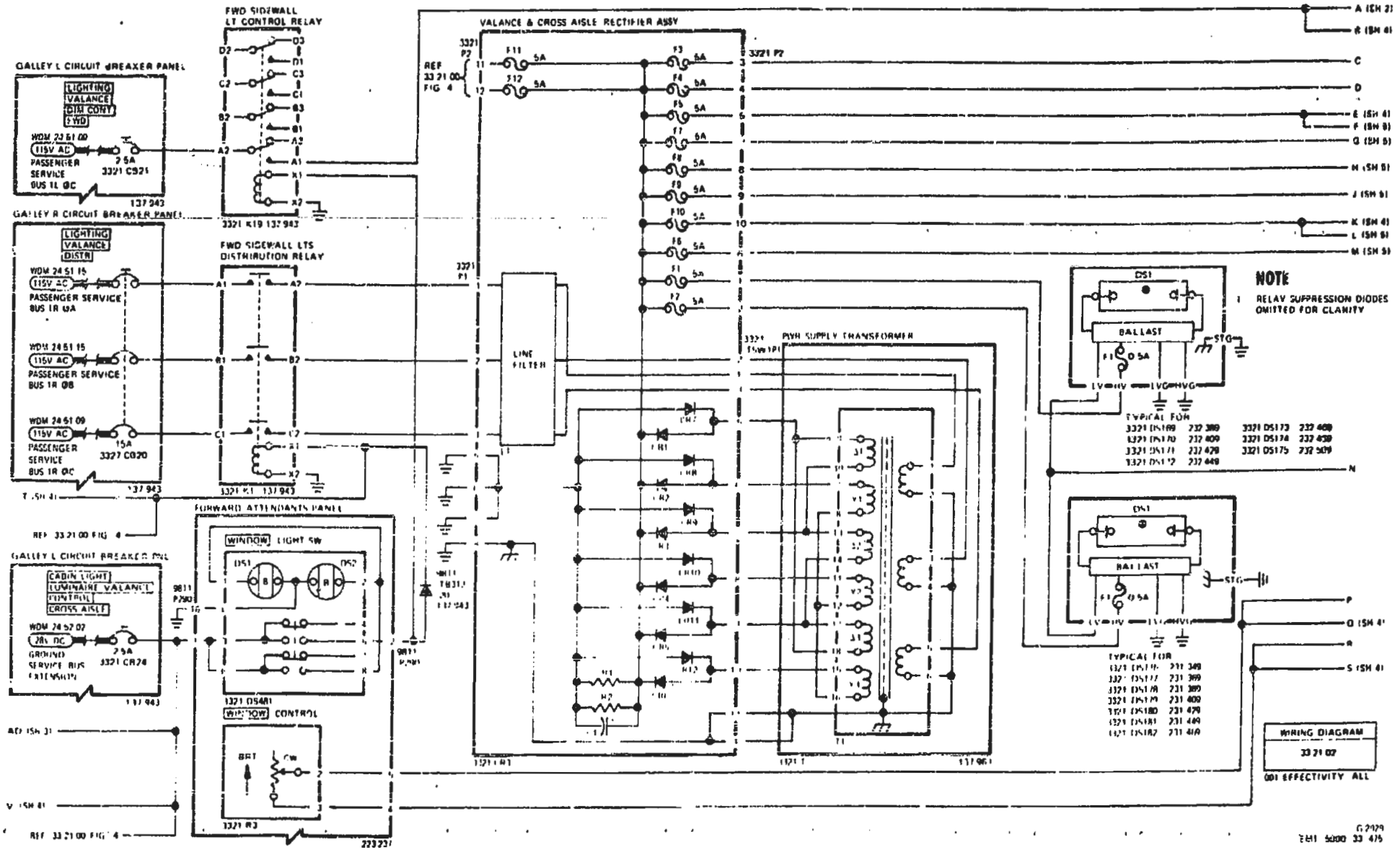
Luminaire Lights Schematic
Figure 9 (Sheet 4)

EFFECTIVITY: 001-031



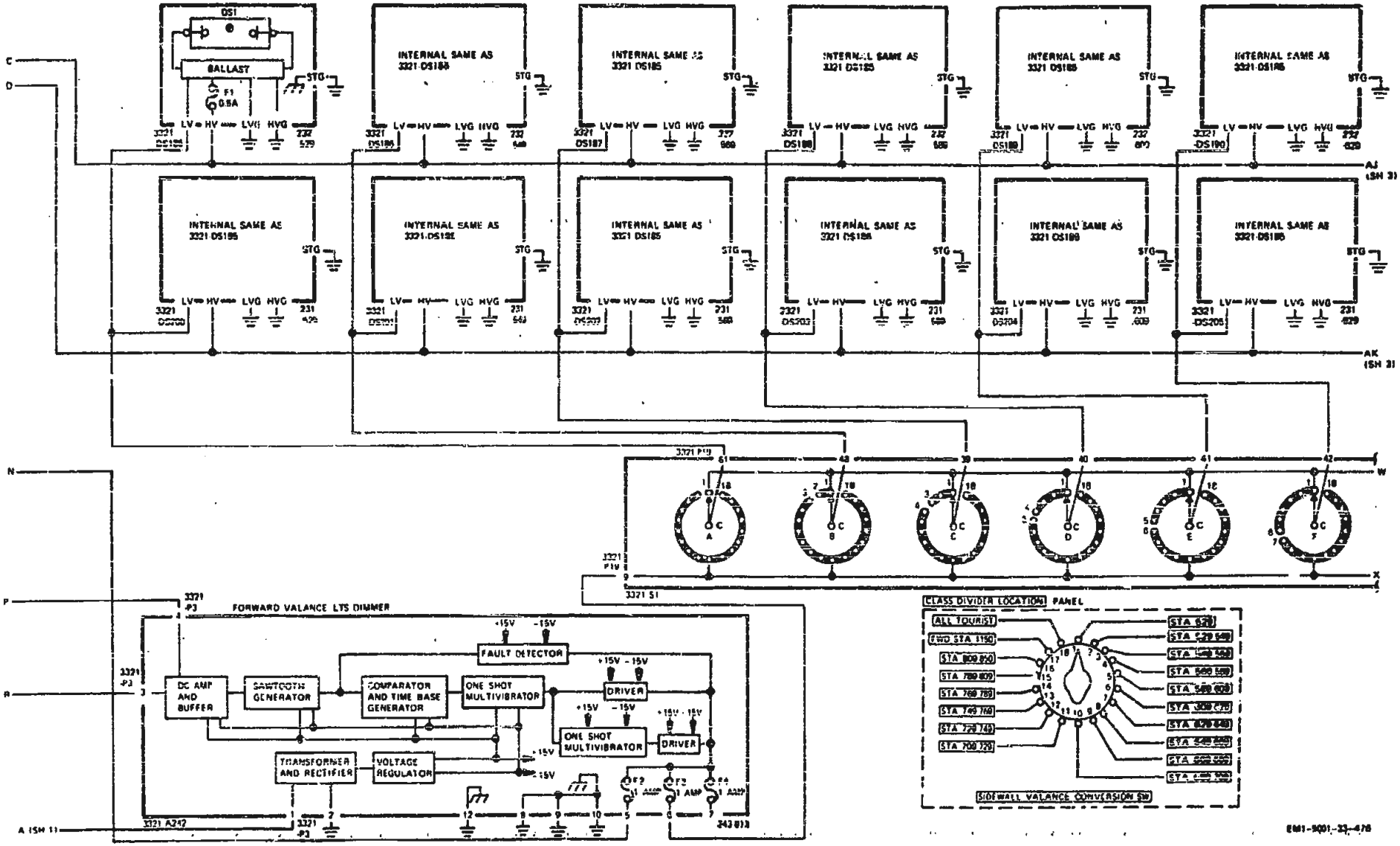
Window Valance Lights
Figure 10

EFFECTIVITY: 001-031



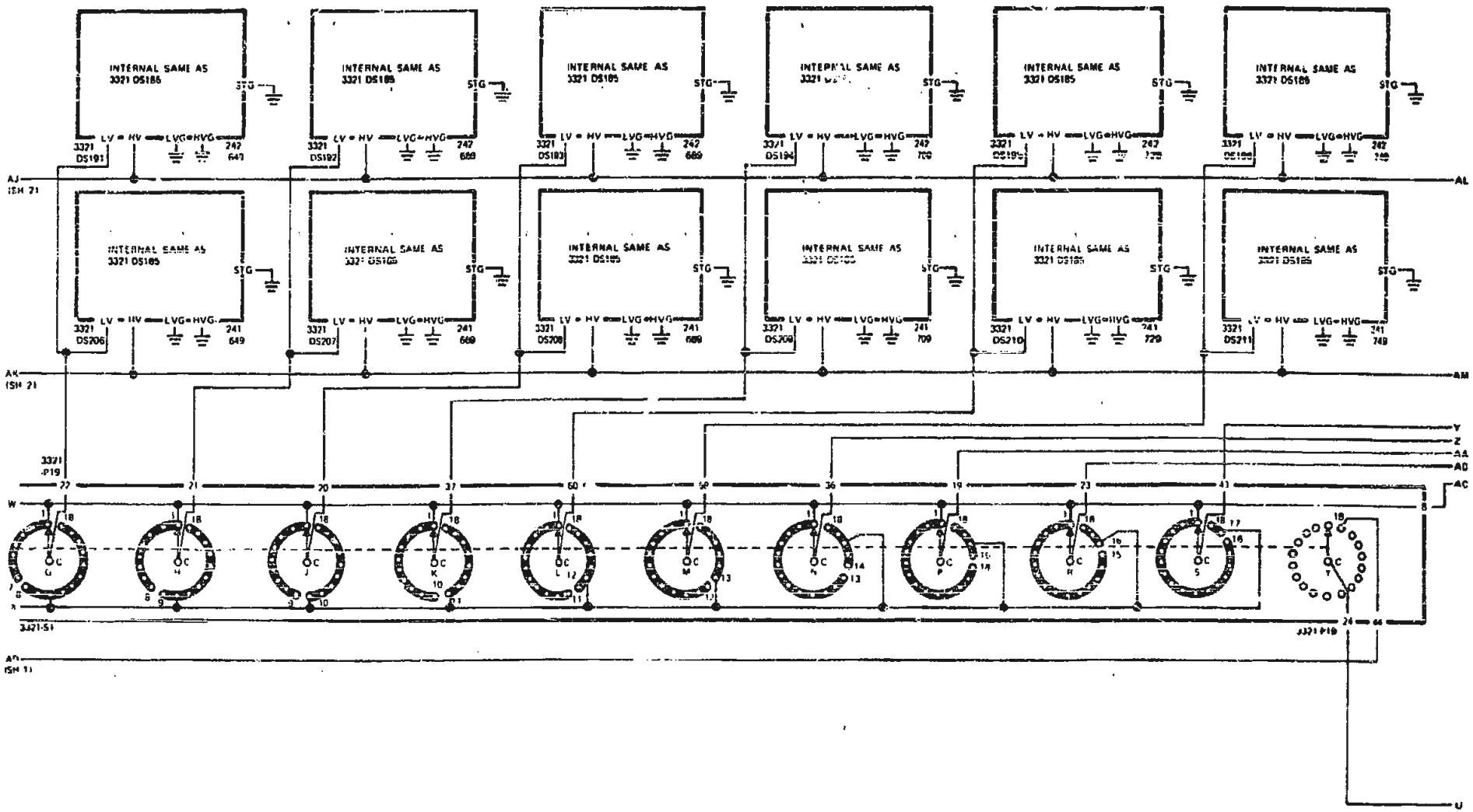
Window Valance Lights Schematic
Figure 11 (Sheet 1)

EFFECTIVITY: 001-031



Window Valance Lights Schematic
Figure 11 (Sheet 2)

EFFECTIVITY: 001-031

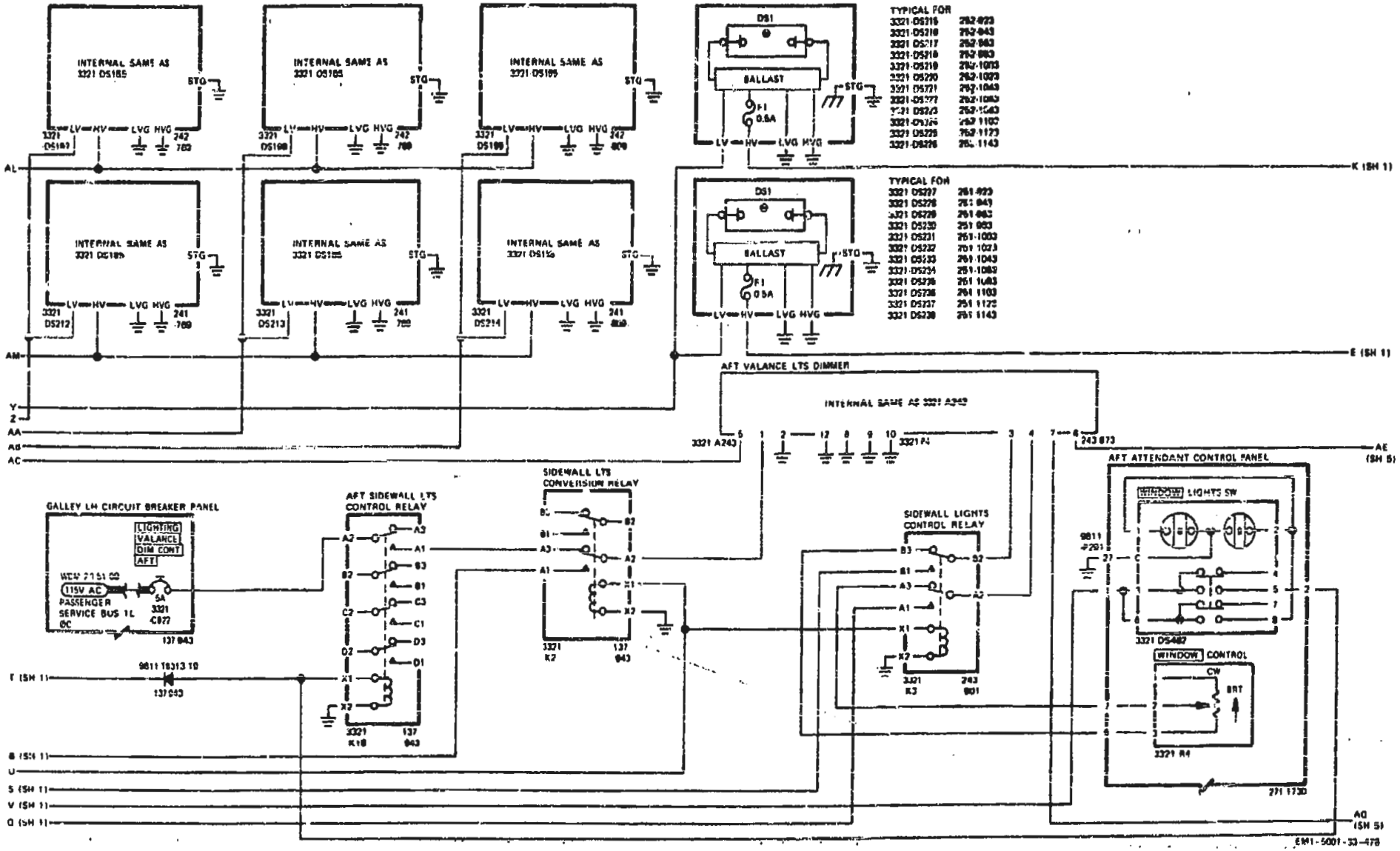


G 2935
EM1-5000 33-477

R Window Valance Lights Schematic
R Figure 11 (Sheet 3)

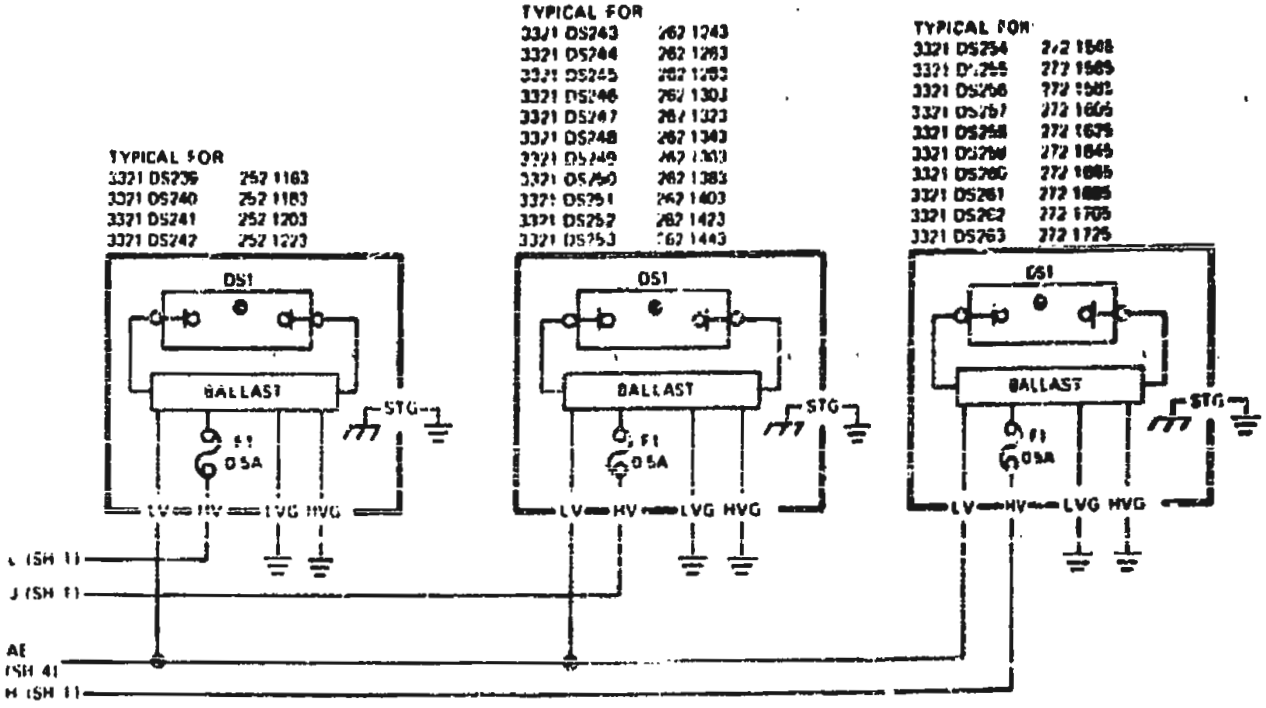
EFFECTIVITY: 001-031

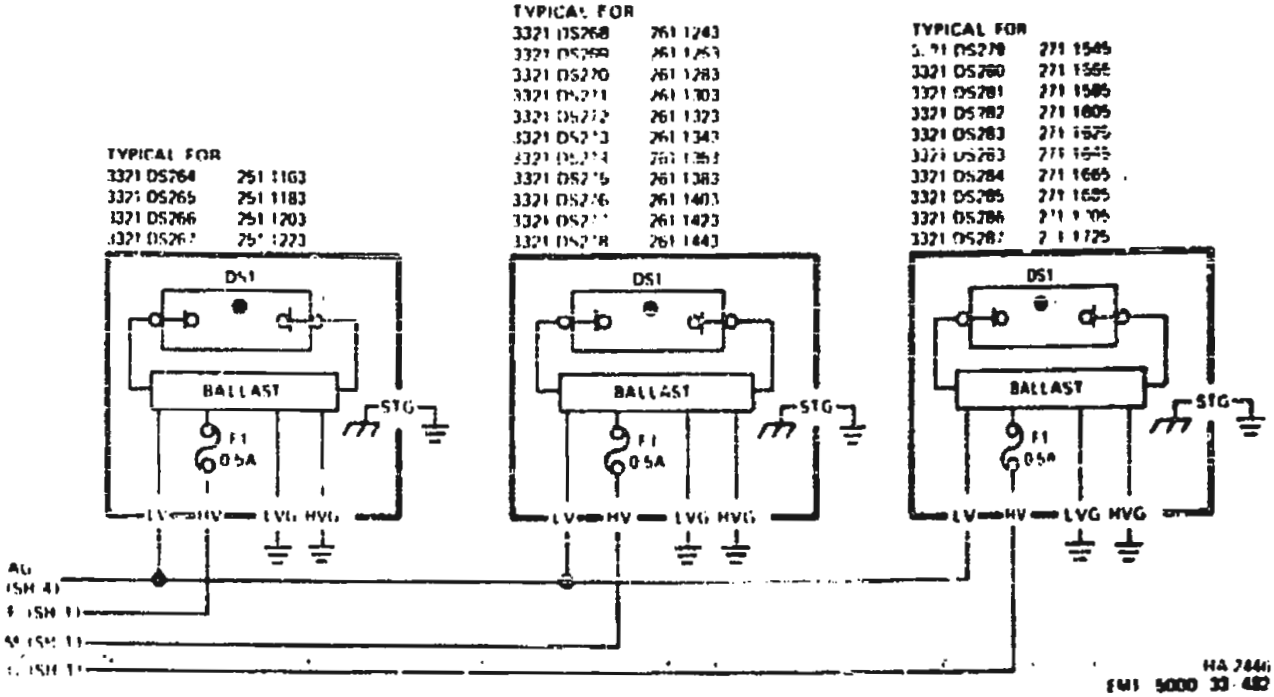
0018



R Window Valance Lights Schematic
R Figure 11 (Sheet 4)

EFFECTIVITY: 001-031

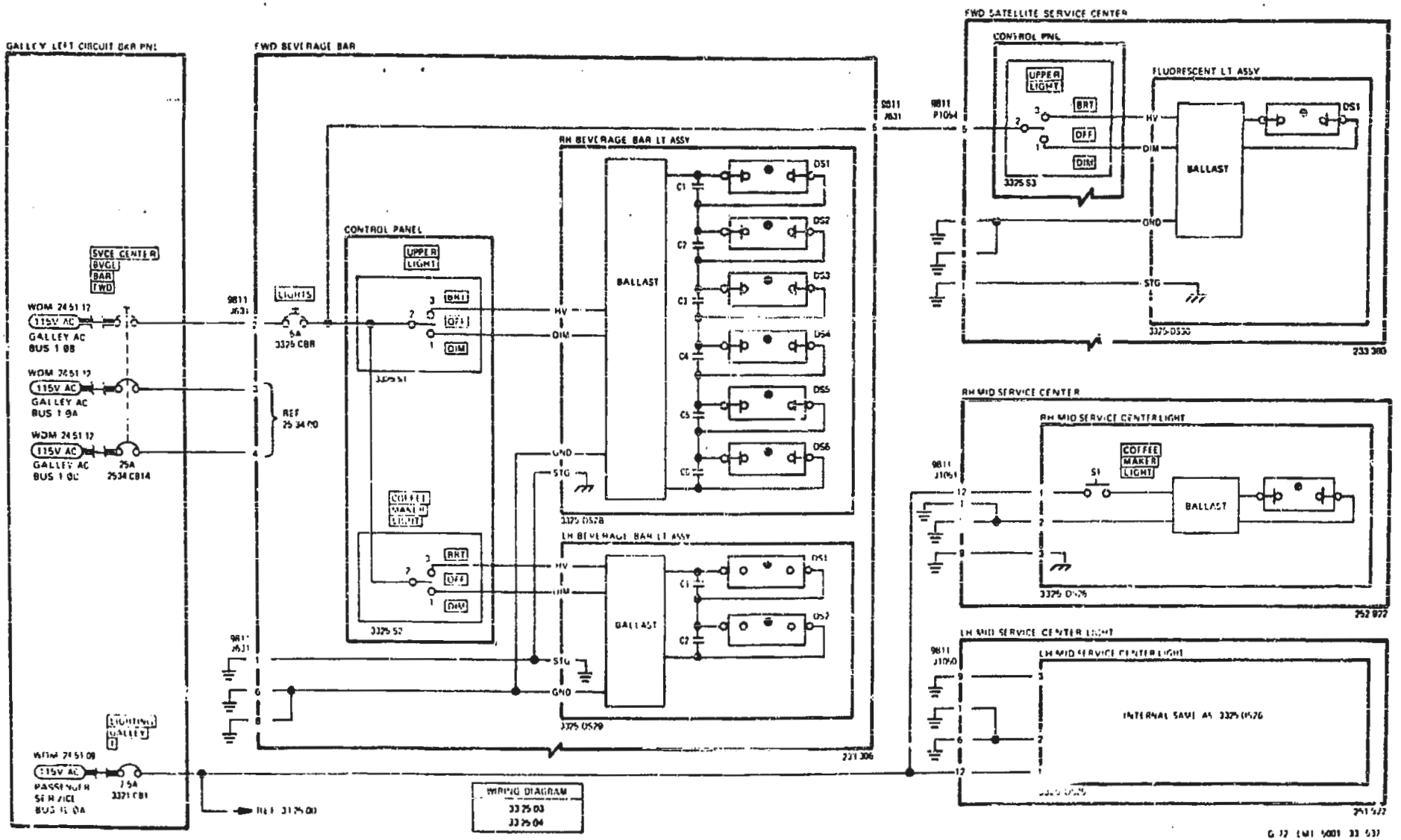




HA 7446
EMI 9000 33-482

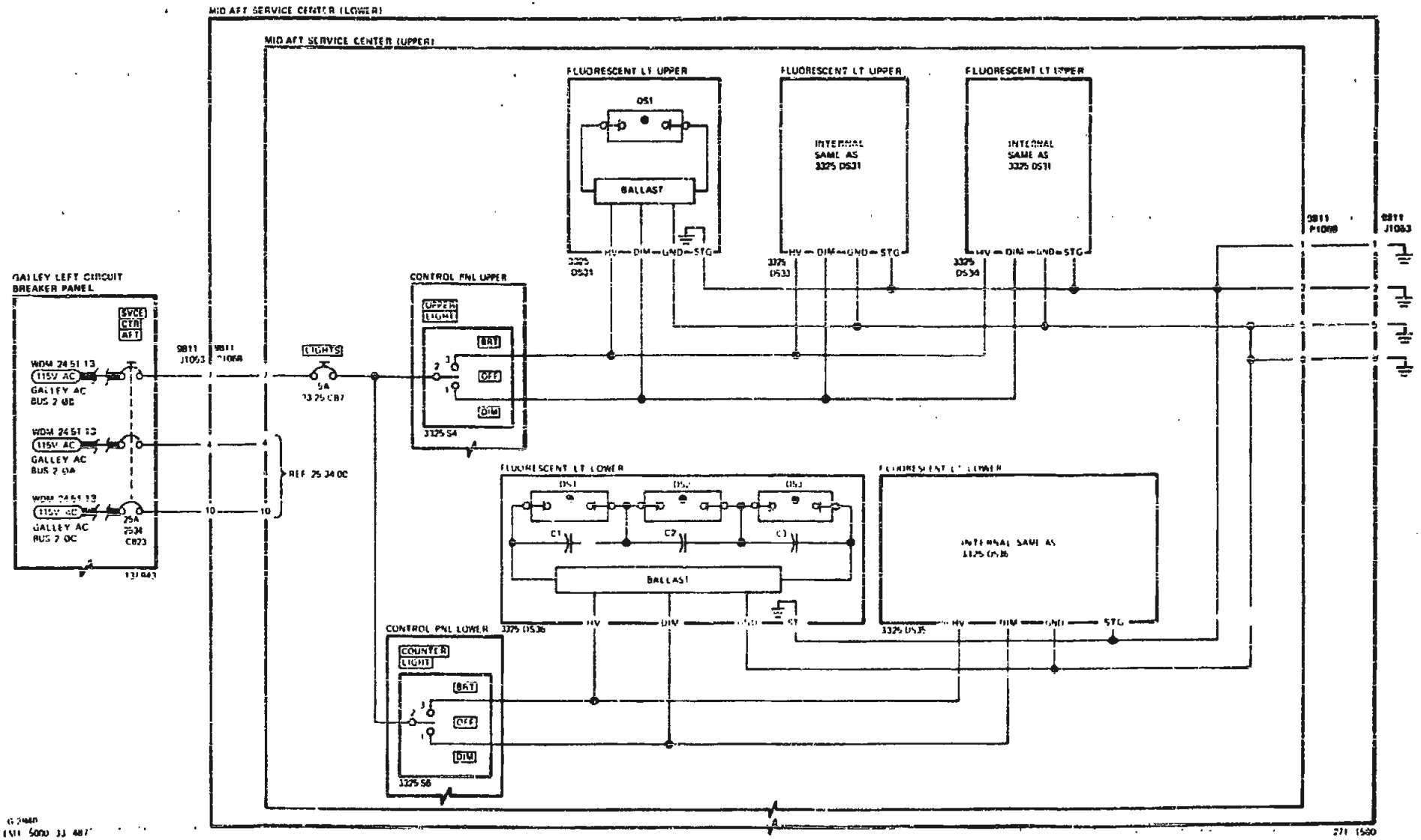
R Window Valance Lights Schematic
R Figure 11 (Sheet 5)

EFFECTIVITY: 001-031



R Buffet Lights Schematic
R Figure 12 (Sheet 1)

EFFECTIVITY: 001-031



R
R

Buffet Lights Schematic
Figure 12 (Sheet 2)

EFFECTIVITY: 001-031

0018

AISLE, CEILING, AND BUFFET LIGHTING - DESCRIPTION AND OPERATION

1. General

The following lights are covered in this section:

Aisle lights

Cross-aisle lights

Ceiling lights - soffit and luminaire

Window valance lights

Buffet Lights

2. Aisle Lights

A. Description and Operation

Twenty (20) incandescent aisle lights are located in the ceiling (Ref. Fig. 1). The lights are dual-purpose fixtures. The normal lamps are powered by the aircraft electrical system: fourteen (14) by dc bus 3, and six (6) by the dc standby bus (Ref. Fig. 2). The emergency lamps are powered by emergency power packs (Ref. 33-51-00).

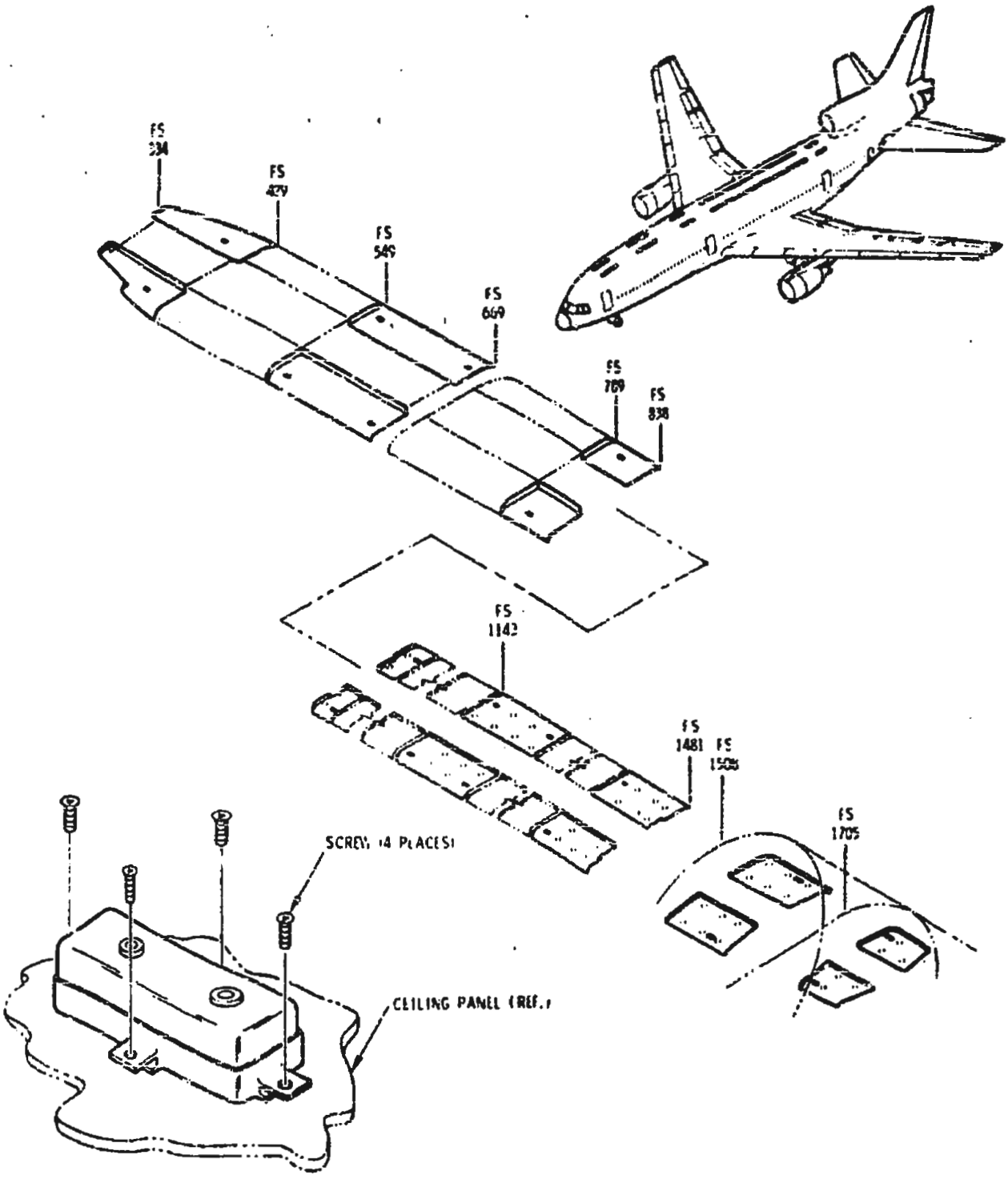
The aisle lights forward of the cross-aisle are controlled by an AISLE switchlight on the forward attendants panel, zone 220. The lights aft of the cross-aisle are controlled by an AISLE switchlight on the aft attendants panel, zone 270.

In case of failure of normal dc power, the six (6) aisle lights energized from the dc standby bus will be powered by the aircraft battery (Ref. 24-32-00).

3. Cross-aisle Lights

A. Description and Operation

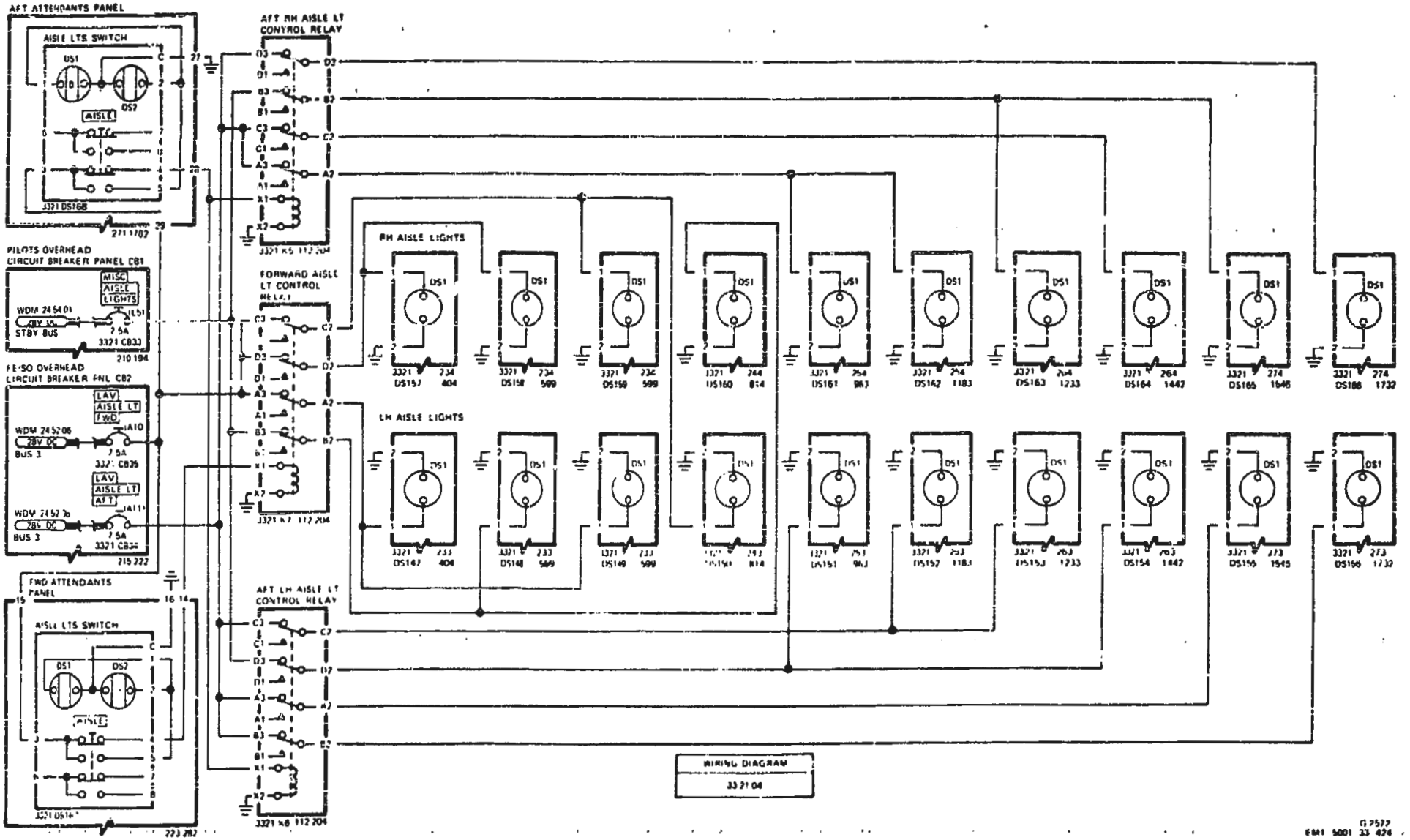
The cross-aisle lights consists of four (4) fluorescent lights mounted in the ceiling forward of the galley lifts, zone 240 (Ref. Fig. 3). The lights are controlled by a dimming controller on the galley upper lift control panel (Ref. Fig. 4).



TYPICAL AISLE LIGHT INSTALLATION

HH 5563
M1-A00-33-002

Aisle Lights
Figure 1



Aisle Lights Schematic
Figure 2

EFFECTIVITY: 032-999

Power to the cross-aisle lights is supplied by passenger service bus 1L (Ref. Fig. 4) on the galley left circuit breaker panel, zone 137. Rotating the dimming controller clockwise will supply 115V ac power to the cross-aisle light assembly ballast units to illuminate the lights above the mid cabin service center in dim condition. Further rotating this controller clockwise will increase the brightness of these lights.

4. Ceiling Lights

A. Description

The ceiling lights consist of soffit and luminaire lights arranged in alternate groups (Ref. Fig. 5 and 6). The soffit and luminaire lights forward of the class divider are controlled by their respective rotary switches on the forward attendants panel. The lights aft of the class divider are similarly controlled from the aft attendants panel. Terminal board TB1264, zone 254, with jumper connections provides for selection of the number of lights to be controlled by the forward and aft attendants panel.

For soffit light control, with movement of class divider refer to Table 1.

Soffit Light Control/Class Divider Movement
Table 1

CLASS DIVIDER LOCATION:	TERMINAL CONNECTIONS AT OVERHEAD RELAY PANEL. ZONE 254, TB1264
Between windows 11&12 (At FS 573)	11A-12C 16B-13C 16C-14C 16D-15C
Between windows 13&14 (At FS 599)	11A-12C 11B-13C 16C-14C 16D-15C
Between windows 14&15 (At FS 621)	11A-12C 11B-13C 11C-14C 16D-15C
Between windows 15&16 (At FS 645)	11A-12C 11B-13C 11C-14C 16D-15C

Soffit Light Control/Class Divider Movement (Cont)
Table 1

CLASS DIVIDER LOCATION:	TERMINAL CONNECTIONS AT OVERHEAD RELAY PANEL. ZONE 254, TB1264
Between windows 23&24 (At FS 801)	24A-21C 19B-22C 19C-23C
Between window 25 & Passenger door 2 (At FS 849)	24A-21C 24B-22C 19C-23C
Between windows 36&37 (At FS 1150)	24A-21C 24B-22C 24C-23C

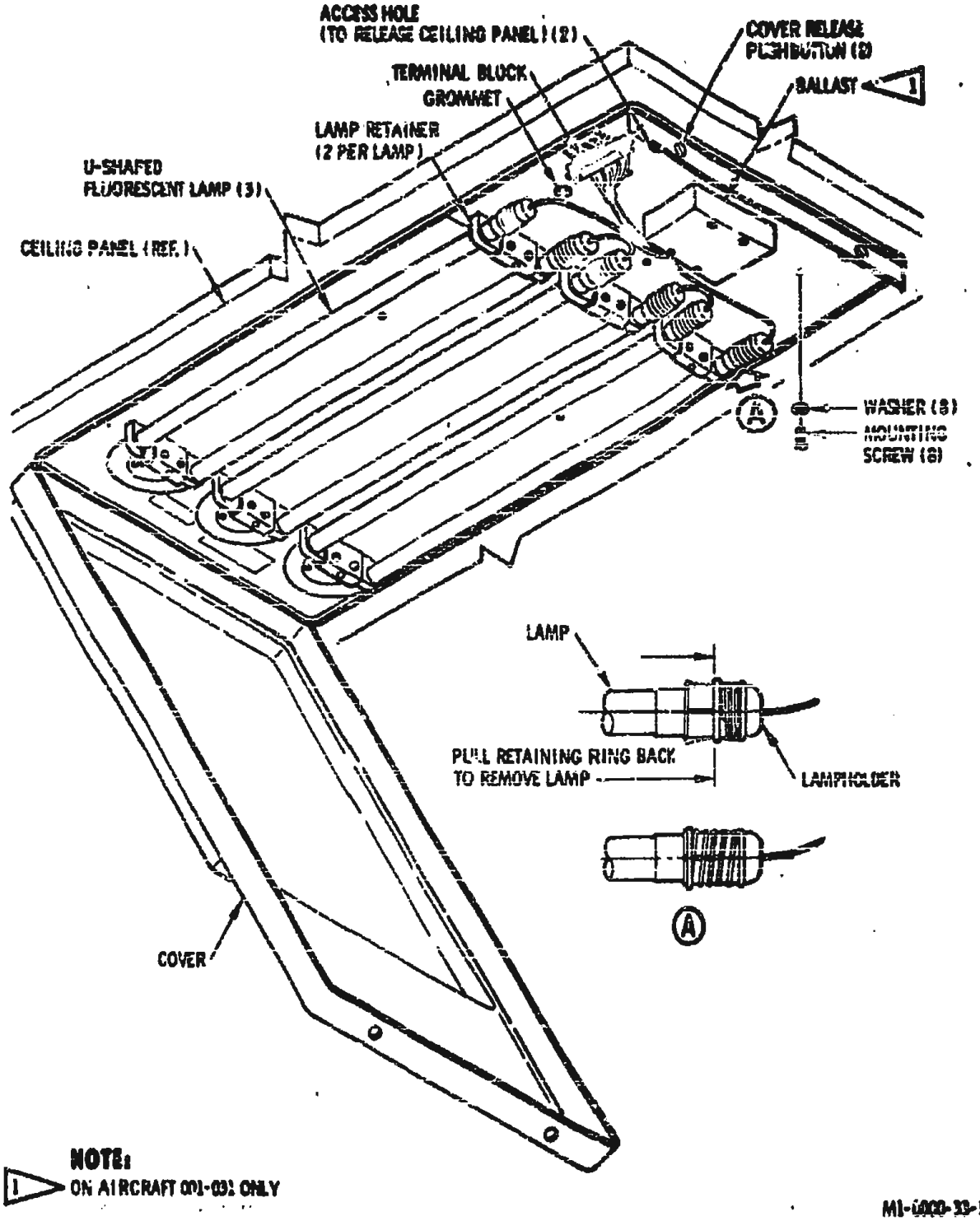
B. Soffit Light Operation

The soffit lights are powered by 115V ac bus 1A, located on galley left circuit breaker panel, zone 137 (Ref. Fig. 7). Each soffit light incorporates a 115/26V ac stepdown transformer.

Placing the soffit light control switch on the forward attendants panel, zone 223, in the DIM position, energizes the SOFFIT LT CONT FWD relay, zone 130, supplying 115V ac power from the PASS SVCE BUS 1A to the forward dimming transformer, zone 130. The transformer supplies 26V ac via the deenergized forward soffit lights dimming relay to soffit lights at FS 405 and forward, and to the forward control class divider connection. Placing the BRT/DIM switch to the BRT position causes the dimming relay to energize, remove the 26V ac transformer output from soffit lights and divider connection, and supplies 115V ac to those
CR lights. The switch at the aft attendants panel controls the
CR lights at FS 1155 and AFT in a similar manner

C NOTE: The two soffit lights above the forward lavatory
C aisle and the four soffit lights above the aft
C lavatory aisle are connected to their respective
CR lavatory light circuit and are not dimmable. Center
CR soffit lights in door 3 cross aisle are powered by
CR the coat stwg actuator circuit breaker located on the
CR RH galley circuit breaker panel and are not dimmable

But the fwd control class divider connection is wired to soffit lights at FS 573 and 599; while the aft control class divider connection is wired to soffit lights at FS 621, 645, 801, 849 and 1150. Lights at these stations may be controlled and powered from aft or fwd soffit lights circuit, by making wiring changes at the soffit lights cabin



Cross-aisle Light
Figure 3

divider switching buses located on the mid cabin overhead relay panel, zone 254.

Eight (8) soffit lights (four over No. 3 cross aisle and four over No. 4 cross aisle) are separately controlled at the aft attendants panel from the normal soffit lighting by AFT AISLE LIGHT dimming control transformer, zone 273. Clockwise rotation of this control increases the brightness of these lights.

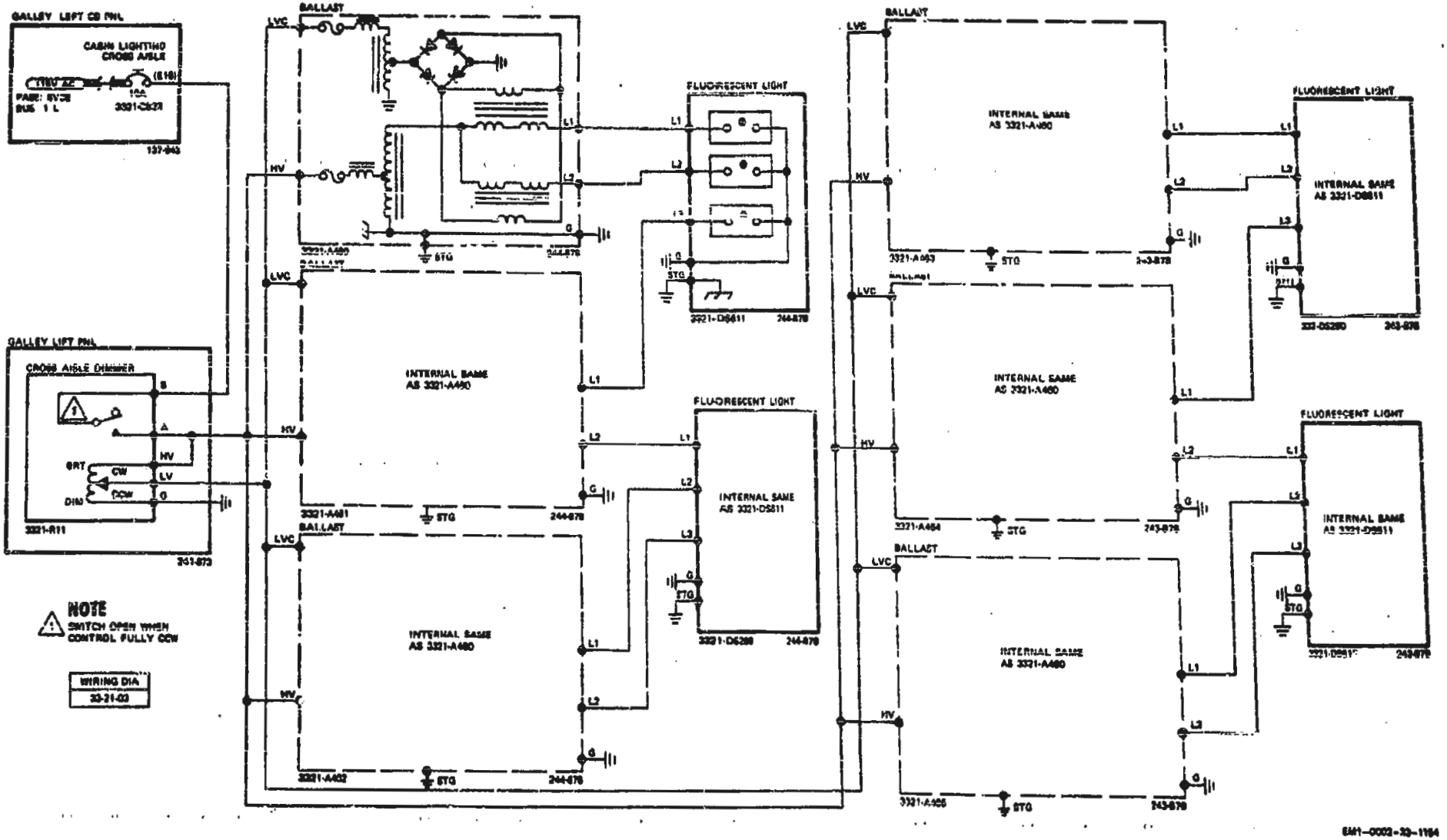
C. Luminaire Light Operation

The luminaire lights are powered by 115V ac passenger service bus 1B, located on galley right circuit breaker panel, zone 137 (Ref. Fig. 8). The lights are controlled by the forward and aft controllers which are manually operated variable transformers incorporating an on/off switch. Turning the luminaire light dimming controller on either the forward or aft attendants panel clockwise from off position will energize the associated power distribution relay to supply single phase 115V ac to its luminaire light assembly ballast units. The relays are powered by 28V dc ground service bus extension located on galley left circuit breaker panel, zone 137.

Luminaire lights are brilliance controlled through magnetic amplifiers located in their respective ballast units. The position of the control knob will determine the control voltage to the magnetic amplifiers.

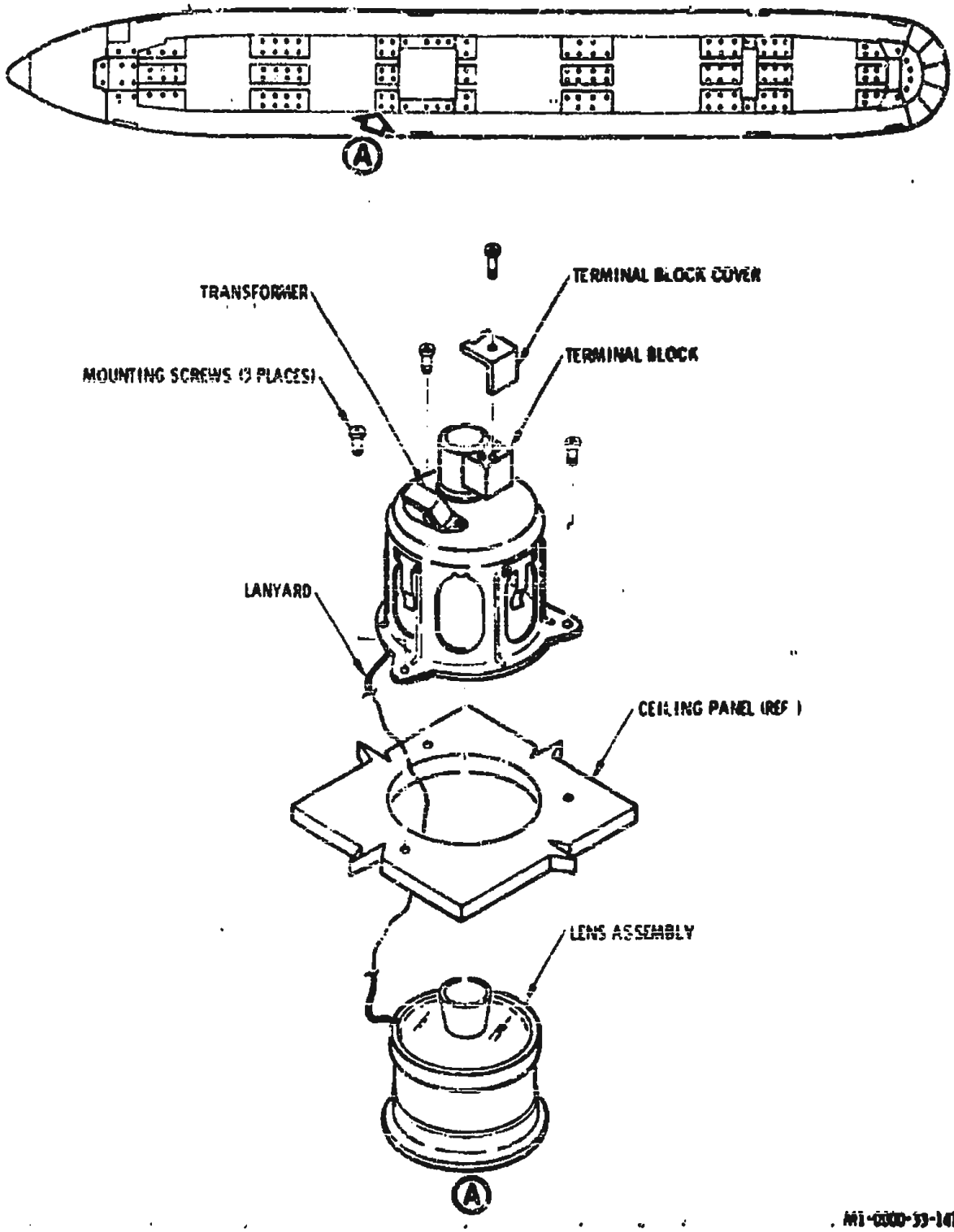
Terminal boards above each luminaire light assembly are used to connect aircraft wiring to ballast units and light assemblies. At FS 485 and forward, terminal boards have the LVC terminal directly connected to the forward attendants controller output; at FS 1260 and aft, terminal boards have the LVC terminal directly connected to the aft attendants controller output. Terminal boards at FS 525 and FS 685 have forward attendants controller output connected to the LVF terminal, and terminal boards at FS 725, 756, 1000, 1040 and 1080 have aft attendants controller output connected to the LVA terminal. Connections from those terminals to the LVC terminal is made by loop connectors.

Switching modules, located on the mid cabin overhead relay panel, are used to determine the source of the high voltage input to the luminaires at those stations. The control of those lights could be transferred to the forward or aft attendants panel depending upon 1st class/coach configuration. Changes could be made by reconnecting the loop connectors from LVF or LVA to the LVC terminal, and rewiring from modules to forward or aft class divider power relay.

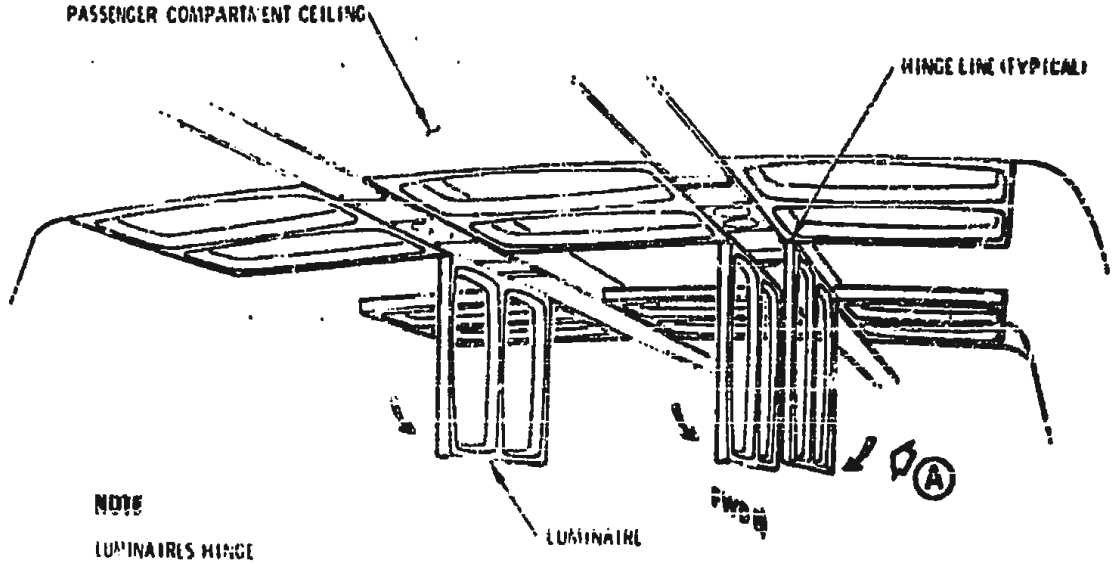


R Cross-aisle Lights Schematic
R Figure 4

EFFECTIVITY: 032-999



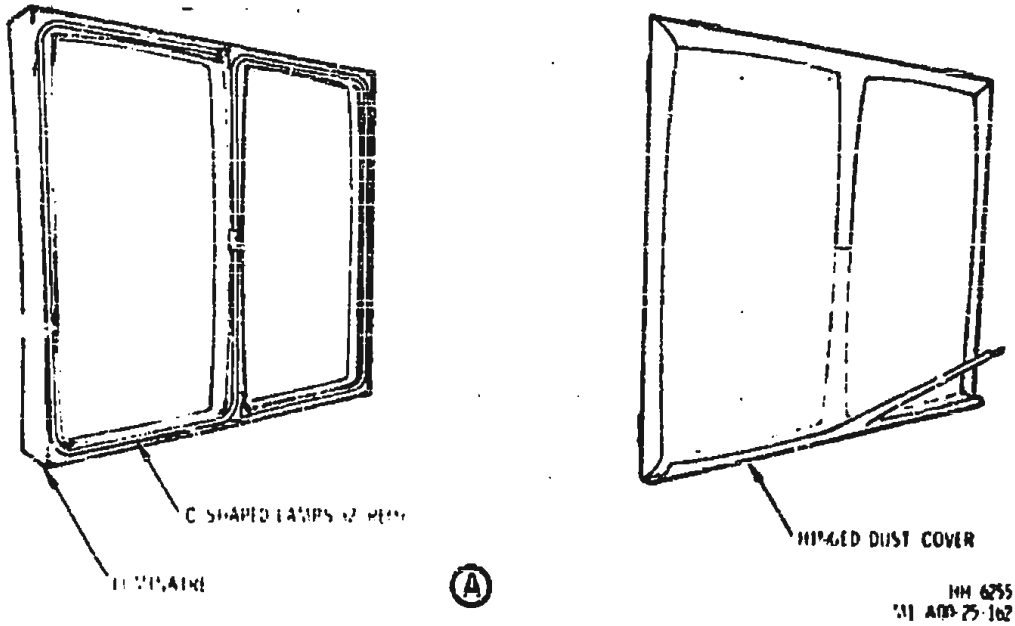
Soffit Lights
Figure 5



NOTE

LUMINAIRES HINGE DOWNWARD TO SERVICE LAMPS

TYPICAL LUMINAIRE LOCATION



HM 6255
AM A00-25-162

Luminaire Lights
Figure 6

For luminaire light control, with movement of class divider refer to Table 2.

Luminaire Light Control/Class Divider Movement
Table 2

CLASS DIVIDER LOCATION:	TERMINAL CONNECTIONS AT OVERHEAD RELAY PANEL. ZONE 254, TB 1289
Between windows 9 & 10 (At FS 525)	10A-14B 14B-18A 18A-10A
Between windows 17 & 18 (At FS 685)	19A-15B 15B-11A 11A-19A
Between windows 19 & 20 (At FS 725)	20A-16B 16B-12A 12A-20A
Between windows 21 & 22 (At FS 765)	21A-17B 17B-13A 13A-21A
Between windows 29 & 30 (At FS 1000)	30A-26B 26B-22A 22A-30A
Between windows 31 & 32 (At FS 1040)	31A-27B 27B-23A 23A-31A
Between windows 33 & 34 (At FS 1080)	32A-28B 28B-24A 24A-32A
Between windows 35 & 36 (At FS 1120)	33A-29B 29B-25A 25A-33A

5. Window Valance Lights

A. Description

The window valance lights form a continuous line of fluorescent light above the windows (Ref. Fig. 9). All lights incorporate a fluorescent lamp and ballast unit. The magnetic amplifiers located in the ballast units control the brilliance of the lights.

Valance lights are controlled by the dimming controller on either the forward or aft attendants panel through a dimming transformer when the sidewall lights distribution relay is energized.

B. Operation

Window valance lights are powered by the 115V ac passenger service bus 1A on the galley left circuit breaker panel, zone 137 (Ref. Fig. 10). The sidewall lights distribution relay is energized from the 28V dc ground service bus extension, zone 137, through contacts of the dimming control transformer at either the forward or the aft attendants panel. Rotating the dimming controller at either attendants panel clockwise from the off position will energize the relay and supply 115V ac power to all the valance lights.

The valance lights are brilliance controlled by the magnetic amplifiers located in the ballast units. The control power for each magnetic amplifier is supplied with low voltage from the forward or aft attendant controller. Further rotation of these controllers clockwise will increase the brightness of valance lights. Each magnetic amplifier controls two valance lights, but at positions where only one light is installed, a dummy load is used.

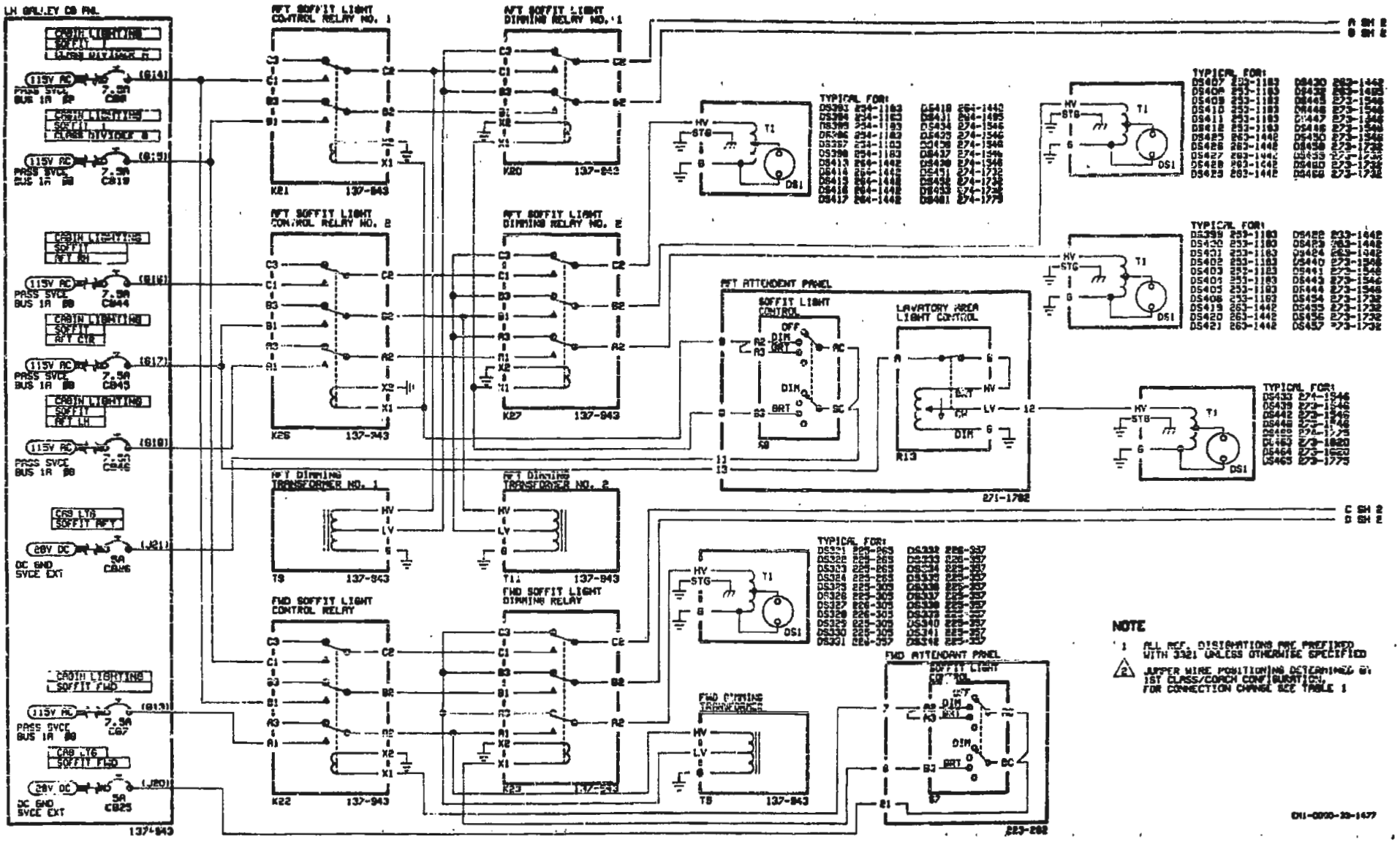
On the valance lights, there are three low voltage control connections labelled LVF, LVA and LVC. On valance lights at FS 539 and forward, the low voltage output from the forward attendant controller is connected directly to the LVC connections. On valance lights at FS 779 and aft, the low voltage output from the aft attendant controller is connected directly to the LVC connections. On valance lights at FS 579, 619, 659, 699, and 739, the low voltage outputs from the forward and aft attendant controllers are connected to the LVF and LVA connections respectively. At these stations loop connectors are used to connect LVF or LVA to LVC terminal depending upon 1st class/coach configuration to enable control of valance lights to be performed by the respective forward or aft attendant controller.

6. Buffet Lights

A. Description and Operation

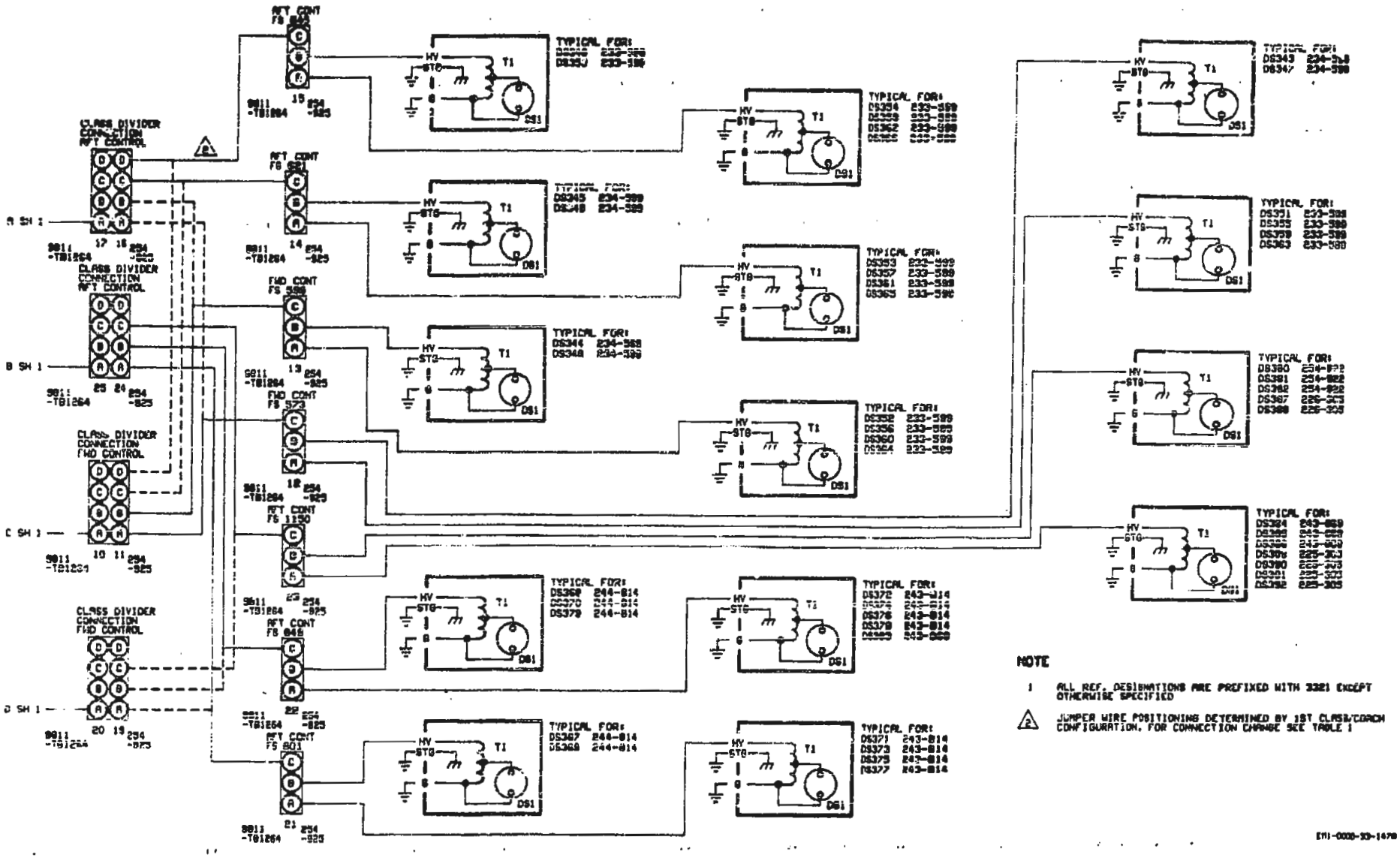
Fluorescent lights are incorporated in buffet facilities as follows:

Forward beverage bar - two (2) lights


LH OBLIQUE CB PNL
AFT SOFFIT LIGHT CONTROL RELAY NO. 1
AFT SOFFIT LIGHT DIMMING RELAY NO. 1
AFT SOFFIT LIGHT CONTROL RELAY NO. 2
AFT SOFFIT LIGHT DIMMING RELAY NO. 2
AFT DIMMING TRANSFORMER NO. 1
AFT DIMMING TRANSFORMER NO. 2
FWD SOFFIT LIGHT CONTROL RELAY
FWD SOFFIT LIGHT DIMMING RELAY
AFT ATTENDANT PANEL
SOFFIT LIGHT CONTROL
LAVATORY AREA LIGHT CONTROL
FWD ATTENDANT PANEL
TYPICAL FOR:
NOTE
1 ALL REF. DESIGNATIONS ARE PREFIXED WITH 3321 UNLESS OTHERWISE SPECIFIED
2 JUMPER WIRE POSITIONING DETERMINED BY 1ST CLASS/COACH CONFIGURATION. FOR CONNECTION CHANGE SEE TABLE 1

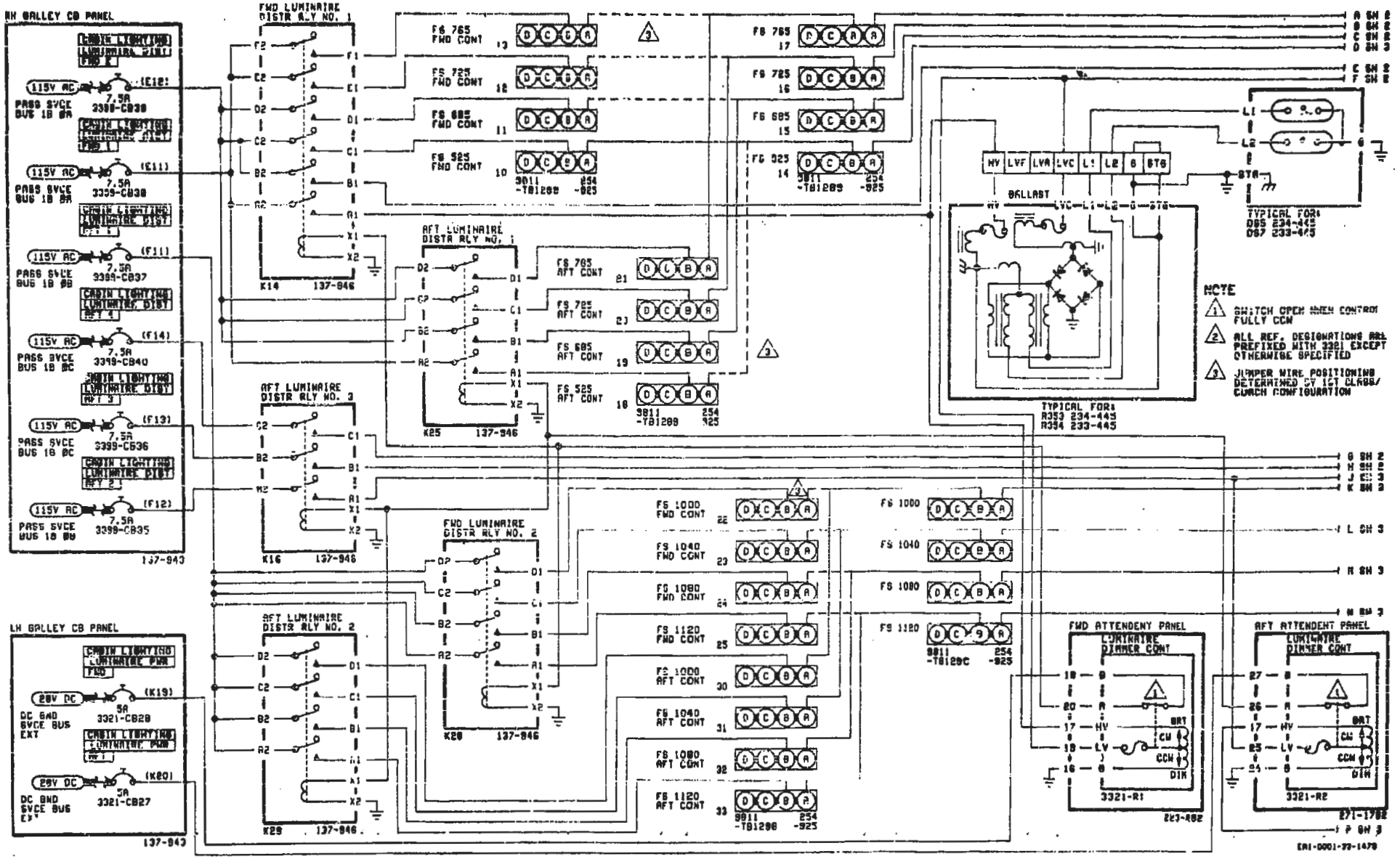
Soffit Lights Schematic
Figure 7 (Sheet 1)

R EFFECTIVITY: 032-999
R


CLASS DIVIDER CONNECTION AFT CONTROL
CLASS DIVIDER CONNECTION FWD CONTROL
AFT CONT FS 825
AFT CONT FS 901
FWD CONT FS 598
FWD CONT FS 373
AFT CONT FS 1150
AFT CONT FS 649
AFT CONT FS 601
TYPICAL FOR:
HV
STG
T1
DS1
NOTE
1 ALL REF. DESIGNATIONS ARE PREFIXED WITH 3321 EXCEPT OTHERWISE SPECIFIED
2 JUMPER WIRE POSITIONING DETERMINED BY 1ST CLASS/COACH CONFIGURATION. FOR CONNECTION CHANGE SEE TABLE 1

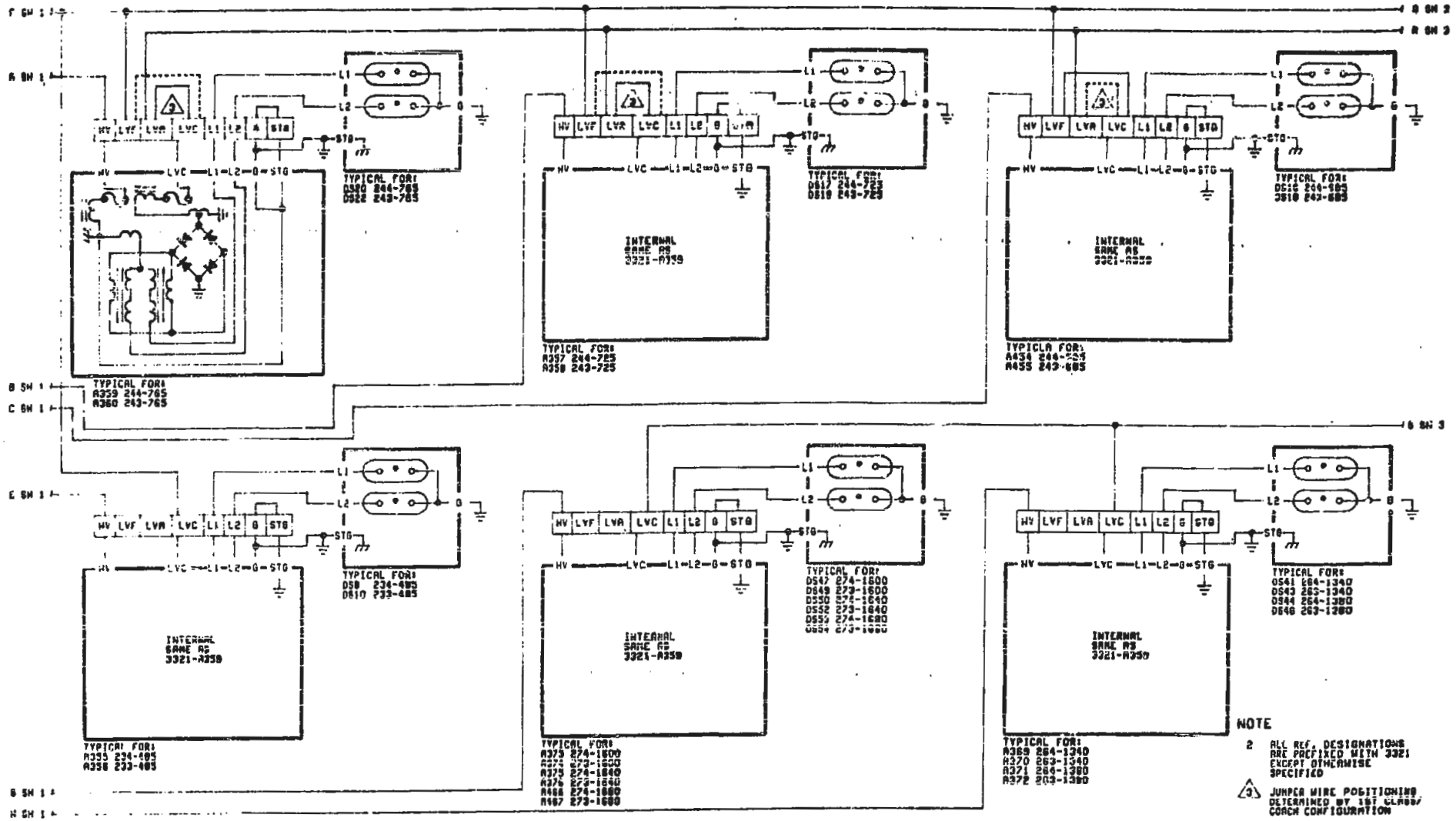
Soffit Lights Schematic
Figure 7 (Sheet 2)

EFFECTIVITY: 032-999


RH GALLEY CB PANEL
FWD LUMINAIRE DISTR RLY NO. 1
AFT LUMINAIRE DISTR RLY NO. 1
AFT LUMINAIRE DISTR RLY NO. 3
FWD LUMINAIRE DISTR RLY NO. 2
AFT LUMINAIRE DISTR RLY NO. 2
LH GALLEY CB PANEL
115V AC
28V DC
7.5A
5A
PASS SVCE BUS 1B ØA
PASS SVCE BUS 1B ØB
PASS SVCE BUS 1B ØC
PASS SVCE BUS 1B ØD
DC GND SVCE BUS EXT
CABIN LIGHTING LUMINAIRE PWR FWD
CABIN LIGHTING LUMINAIRE DIST
FS 765 FWD CONT
FS 725 FWD CONT
FS 685 FWD CONT
FS 925 FWD CONT
FS 765 AFT CONT
FS 725 AFT CONT
FS 685 AFT CONT
FS 925 AFT CONT
FS 1000 FWD CONT
FS 1040 FWD CONT
FS 1080 FWD CONT
FS 1120 FWD CONT
FS 1000 AFT CONT
FS 1040 AFT CONT
FS 1080 AFT CONT
FS 1120 AFT CONT
FS 1000
FS 1040
FS 1080
FS 1120
HV LVF LVA LVC L1 L2 G BTG
BALLAST
TYPICAL FOR: R353 234-445 R354 233-445
TYPICAL FOR: R85 234-445 R87 233-445
FWD ATTENDENT PANEL
AFT ATTENDENT PANEL
LUMINAIRE DIMMER CONT
3321-R1
3321-R2
NOTE
1 SWITCH OPEN WHEN CONTROL FULLY CCW
2 ALL REF. DESIGNATIONS ARE PREFIXED WITH 3321 EXCEPT OTHERWISE SPECIFIED
3 JUMPER WIRE POSITIONING DETERMINED BY IST CLASS/ COACH CONFIGURATION

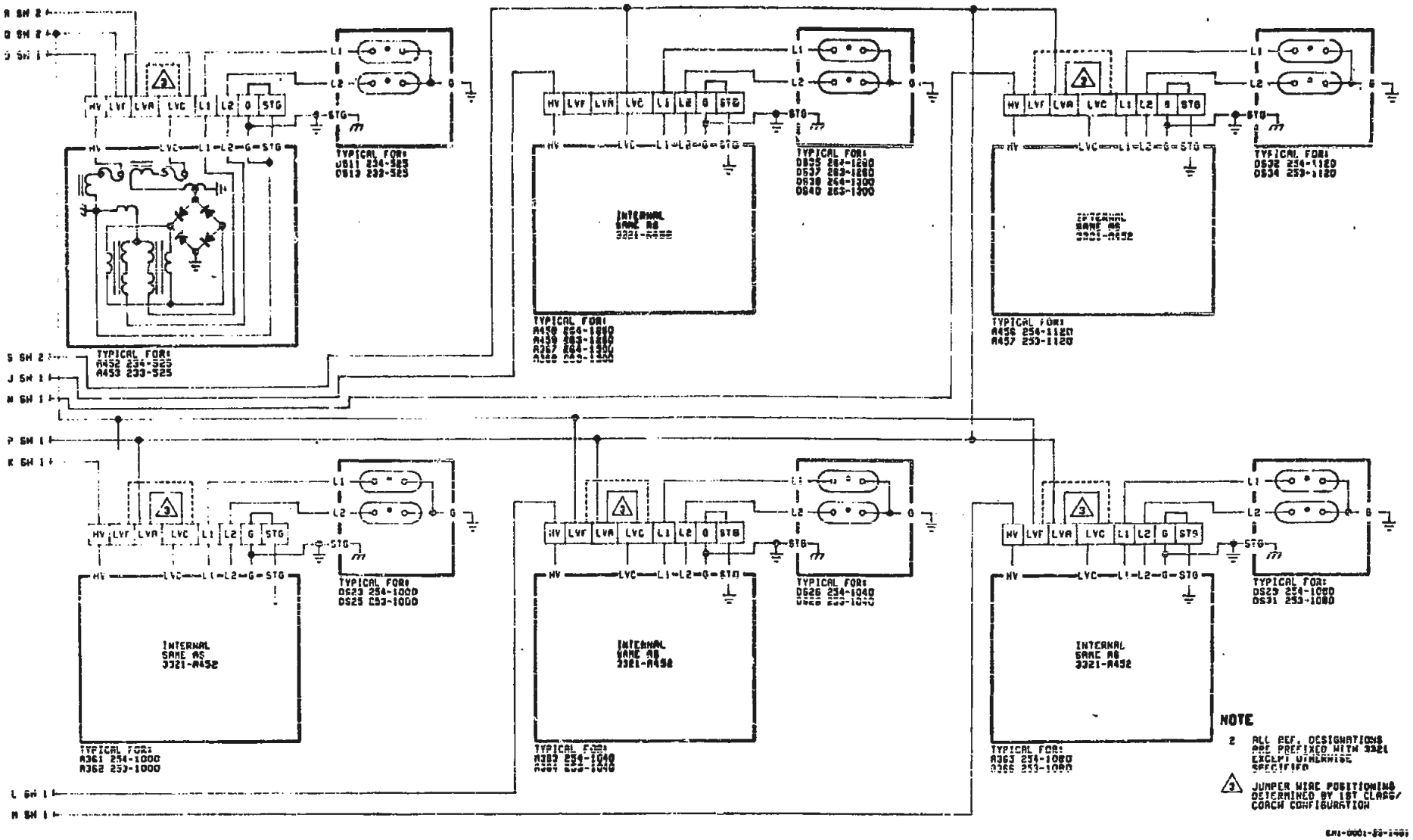
Luminaire Lights Schematic
Figure 8 (Sheet 1)

EFFECTIVITY: 032-999



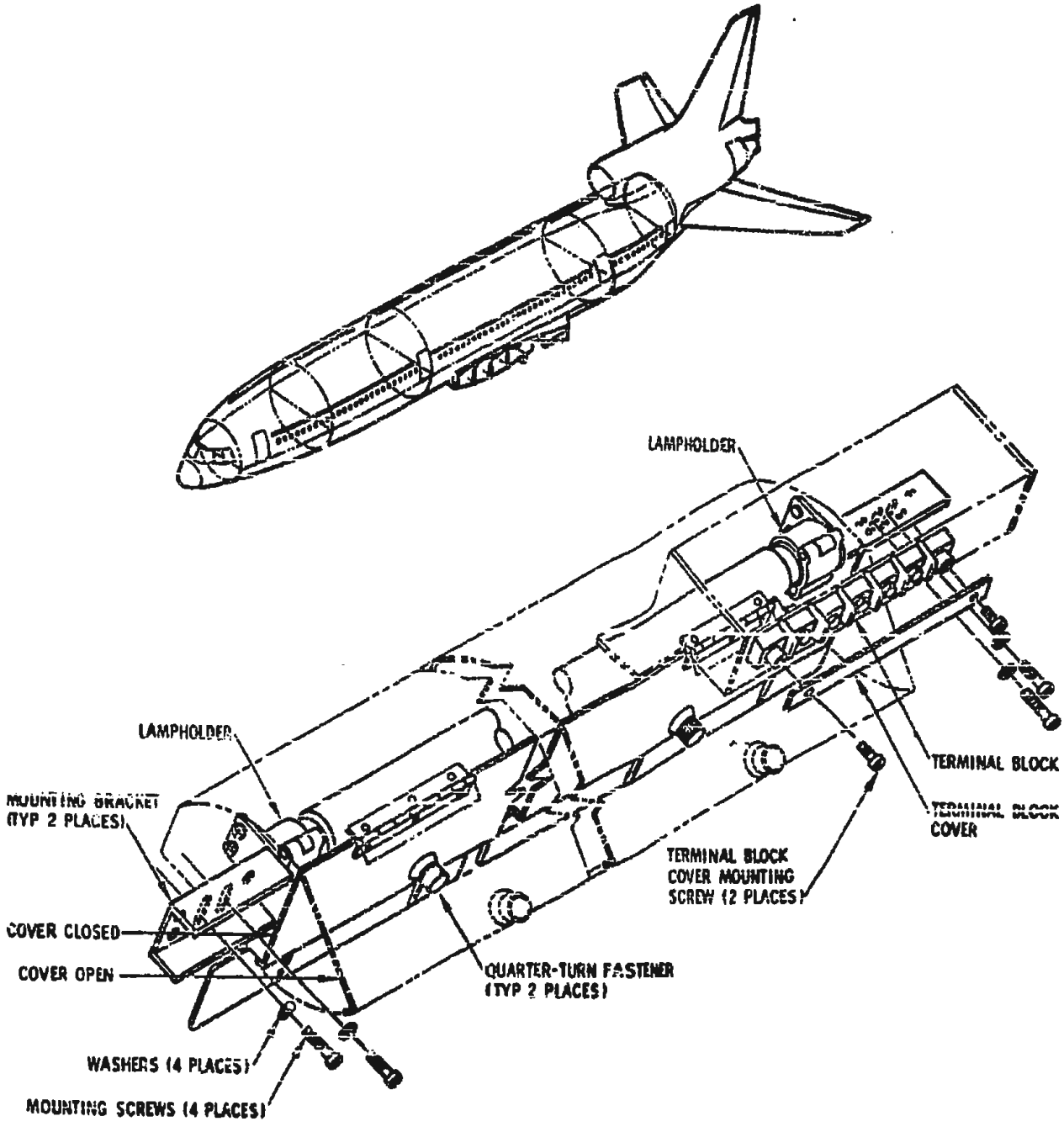
R Luminaire Lights Schematic
R Figure 8 (Sheet 2)

EFFECTIVITY: 032-999



R Luminaire Lights Schematic
R Figure 8 (Sheet 3)

EFFECTIVITY: 032-999



AH 7666
MI-0100-33-034

Window Valance Lights
Figure 9

R EFFECTIVITY: 032-999
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002R

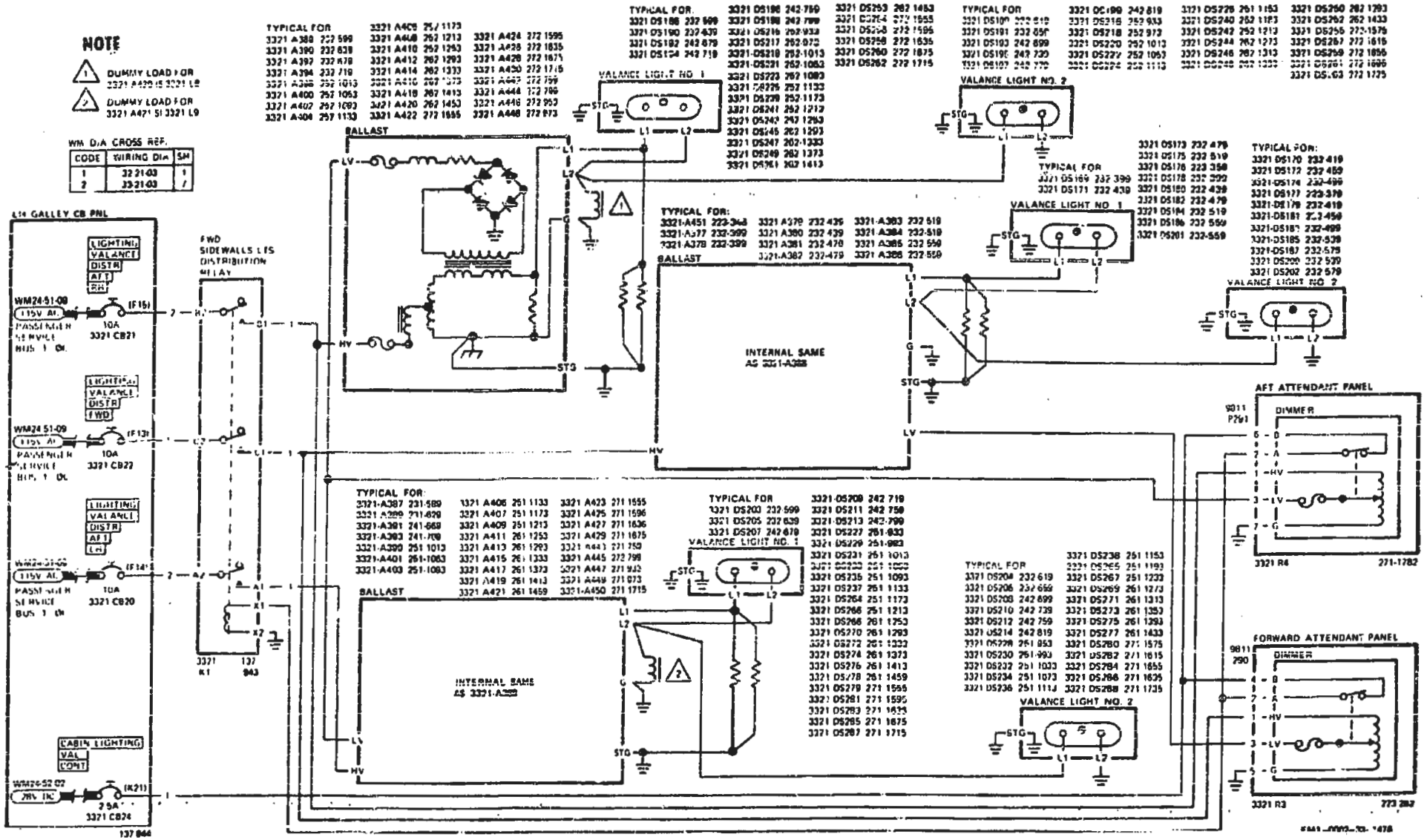
Forward service center - one (1) light

Mid service center - two (2) lights

Aft service center - five (5) lights

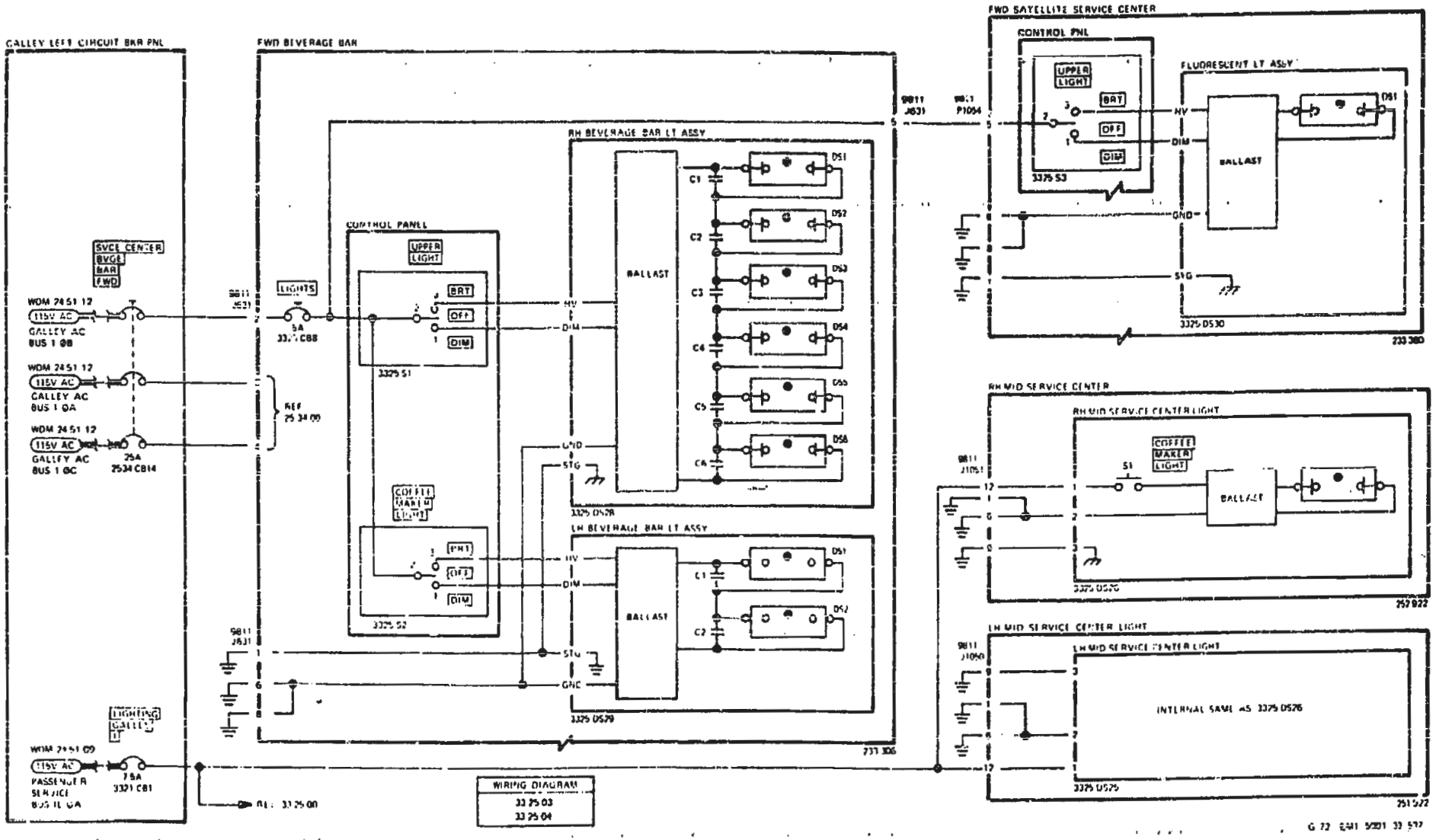
The forward beverage bar, forward service center, and aft service center lights are controlled by rocker-type switches with DIM, OFF, and BRT positions (Ref. Fig. 12). The mid service center lights are controlled individually by integral switches and are not dimmable.

Wiring is also installed for the aft coffee bar light. The light is not installed.



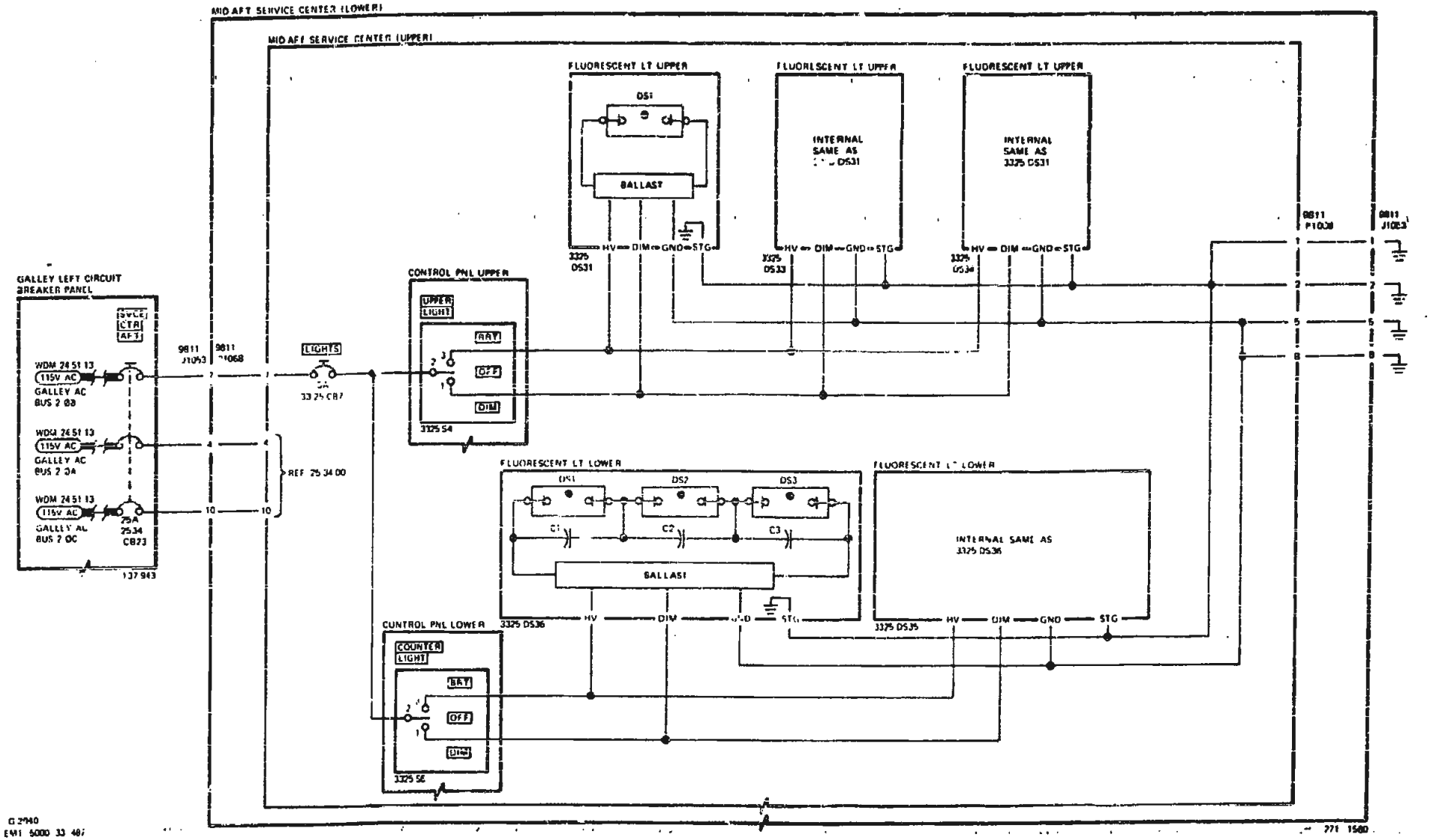
R R Window Valance Lights Schematic
Figure 10

EFFECTIVITY: 032-999



Buffet Lights Schematic
Figure 11 (Sheet 1)

R EFFECTIVITY: 032-999
R



Buffet Lights Schematic
Figure 11 (Sheet 2)

AISLE CEILING AND BUFFET LIGHTING - FAULT ISOLATION

1. General

The electrical schematics in this section can be used for fault isolation any time a fault is reported or suspected. Due to the relative simplicity of the circuits, no detailed fault isolation procedures are provided. Refer to the Maintenance Manual Introduction for a more detailed discussion of the Fault Isolation Reporting Method (FIRM) and use of fault isolation diagrams/schematics.

2. Fault Isolation/Identification

Table 101 lists the fault isolation diagrams and schematics in this section.

Table 101

	FIGURE	TITLE
	101	Component Location Index
	102	Component Locator Diagram
	103	Luminaire Lights Fault Isolation Guide
	SCHEM 1	Aisle Lights Schematic
R	SCHEM 2	Soffit Lights Schematic
R	SCHEM 3	Luminaire Lights Schematic
R	SCHEM 4	Window Valance Lights Schematic
R	SCHEM 5	Buffet Lights Schematic
R	SCHEM 6	Cross Aisle Lights Schematic

COMPONENT	QTY	AREA/ACCESS	REFERENCE
CIRCUIT BREAKERS:			
LAV AISLE LT AFT, 3321-CB34	1	FE/SO OVHD CB PNL CB2 A11	*
LAV AISLE LT FWD, 3321-CB35	1	FE/SO OVHD CB PNL CB2 A10	*
MISC AISLE LIGHTS, 3321-CB33	1	PILOTS OVHD CB PNL CB1 L5	*
LIGHTS - AISLE	20	AISLE AREA CEILING PNL	33-21-01
PANEL:			
AFT ATTENDANTS	1	PASSENGER COMPT, LEFT	33-20-00
FWD ATTENDANTS	1	PASSENGER COMPT, LEFT	33-20-00
RELAY:			
AFT LH AISLE LT CONTROL 3321-K6	1	FESC/112AB	*
AFT RH AISLE LT CONTROL 3321-K5	1	FESC/112AB	*
FWD AISLE LT CONTROL 3321-K7	1	FESC/112AB	*

*SEE WM EQUIPMENT LIST

M1-0001-33-1318

R Aisle Lights Component Location Index
R Figure 101 (Sheet 1)

EFFECTIVITY: ALL

COMPONENT	QTY	AREA/ACCESS	REFERENCE
CIRCUIT BREAKERS:			
CABIN LIGHTING DIM CONT MOTOR AFT 3321-CB10	1	GALLEY LH CB PNL	*
CABIN LIGHTING DIM CONT MOTOR FWD 3321-CB6	1	GALLEY LH CB PNL	*
CABIN LIGHTING SOFFIT AFT 3318-CB19	1	GALLEY LH CB PNL	*
CABIN LIGHTING SOFFIT AFT RH 3321-CB17	1	GALLEY RH CB PNL	*
CABIN LIGHTING SOFFIT CENTER AFT LH 3321-CB18	1	GALLEY RH CB PNL	*
CAB LTG SOFFIT CONT NO. 1 FWD 3321-CB25	1	GALLEY LH CB PNL	*
CAB LTG SOFFIT CONT NO. 1 AFT 3321-CB26	1	GALLEY LH CB PNL	*
CABIN LIGHTING SOFFIT FWD 1 3321-CB7	1	GALLEY LH CB PNL	*
CABIN LIGHTING SOFFIT FWD 1 3321-CB14	1	GALLEY RH CB PNL	*
CABIN LIGHTING SOFFIT FWD 2 3321-CB8	1	GALLEY LH CB PNL	*
CABIN LIGHTING SOFFIT FWD 2 3321-CB12	1	GALLEY RH CB PNL	*
CABIN LIGHTING SOFFIT MID 3321-CB9	1	GALLEY LH CB PNL	*
CABIN LIGHTING SOFFIT MID FWD 1 3321-CB13	1	GALLEY RH CB PNL	*
CABIN LIGHTING SOFFIT MID FWD 2 3321-CB11	1	GALLEY RH CB PNL	*
CABIN LIGHTING SOFFIT MID FWD 3 3321-CB38	1	GALLEY LH CB PNL	*
CABIN LIGHTING SOFFIT MID LH 3321-CB15	1	GALLEY RH CB PNL	*
CABIN LIGHTING SOFFIT MID RH 3321-CB16	1	GALLEY RH CB PNL	*
CONTROLLER:			
AFT DIMMER	1	MESC, 192K/192EA	33-21-15
FWD DIMMER	1	MESC, 192K/192EA	33-21-15
LIGHT – SOFFIT	*	CEILING	33-21-02
PANEL:			
AFT ATTENDANT	1	PASSENGER COMPT LEFT	33-20-00
FWD ATTENDANT	1	PASSENGER COMPT LEFT	33-20-00
RELAY:			
AFT LAV LIGHT CONTROL	1	MESC, 192K/192EA	*
AFT SOFFIT LIGHTS PWR DISTR	1	MESC, 192K/192EA	*
FWD SOFFIT LIGHTS CONVERSION	1	MESC, 192K/192EA	*
FWD SOFFIT LIGHTS PWR DISTR	1	MESC, 192K/192EA	*
SOFFIT LIGHT DIM CONTROL SOURCE SELECT	1	MESC, 192K/192EA	*
SWITCH – CLASS DIVIDER SELECTOR	1	CABIN, ABOVE LIFTS/243BB	33-21-21

*SEE WM EQUIPMENT LIST

M1-0000-33-1240

R Soffit Lights Component Location Index
R Figure 101 (Sheet 2)

COMPONENT	QTY	AREA/ACCESS	REFERENCE
CIRCUIT BREAKERS:			
CABIN LIGHTING SOFFIT CLASS DIVIDER A 3321-CB8	1	GALLEY LH CB PNL G14	*
CABIN LIGHTING SOFFIT CLASS DIVIDER B 3321-CB18	1	GALLEY LH CB PNL G15	*
CABIN LIGHTING SOFFIT FWD 3321-CB7	1	GALLEY LH CB PNL G13	*
CABIN LIGHTING SOFFIT AFT RH 3321-CB44	1	GALLEY LH CB PNL G16	*
CABIN LIGHTING SOFFIT AFT CTR 3321-CB45	1	GALLEY LH CB PNL G17	*
CABIN LIGHTING SOFFIT AFT LH 3321-CB46	1	GALLEY LH CB PNL G18	*
CABIN LTS SOFFIT PWR AFT 3321-CB26	1	GALLEY LH CB PNL J21	*
CABIN LTS SOFFIT PWR FWD 3321-CB25	1	GALLEY LH CB PNL J20	*
LIGHT – SOFFIT	*	CEILING	33-21-02
PANEL:			
AFT ATTENDANT	1	PASSENGER COMPT LEFT	33-20-00
FWD ATTENDANT	1	PASSENGER COMPT LEFT	33-20-00
RELAY:			
AFT SOFFIT LIGHT DIMMING NO. 1	1	MESC/192K/192EA	*
AFT SOFFIT LIGHT DIMMING NO. 2	1	MESC/192K/192EA	*
AFT SOFFIT LIGHT CONTROL NO. 1	1	MESC/192K/192EA	*
AFT SOFFIT LIGHT CONTROL NO. 2	1	MESC/192K/192EA	*
FWD SOFFIT LIGHT DIMMING	1	MESC/192K/192EA	*
FWD SOFFIT LIGHT CONTROL	1	MESC/192K/192EA	*
TRANSFORMER:			
AFT DIMMING NO. 1	1	MESC/192K/192EA	*
AFT DIMMING NO. 2	1	MESC/192K/192EA	*
FWD DIMMING	1	MESC/192K/192EA	*

* SEE WM EQUIPMENT LIST

M1-0000-33-1490

R
R Soffit Lights Component Location Index
Figure 101 (Sheet 2)

EFFECTIVITY: 032-999

0018

COMPONENT	QTY	AREA/ACCESS	REFERENCE
CIRCUIT BREAKERS:			
CABIN LTG LUMINAIRE DIM CONT FWD 3321-CB3	1	GALLEY RIGHT CB PNL	*
CABIN LTG LUMINAIRE DIM CONT AFT 3321-CB4	1	GALLEY RIGHT CB PNL	*
CABIN LTG LUMINAIRE DIST AFT 3321-CB2	1	GALLEY RIGHT CB PNL	*
CABIN LTG LUMINAIRE DIST FWD 3321-CB1	1	GALLEY RIGHT CB PNL	*
CABIN LTG LUMINAIRE VALENCE CONTROL CVRSN C, 3321-CB28	1	GALLEY LEFT CB PNL	*
CABIN LTG LUMINAIRE VALENCE CONTROL MA CB 3321-CB27	1	GALLEY LEFT CB PNL	*
CONTROL:			
AFT DIMMER	1	MESC/192K	33-21-20
FWD DIMMER	1	MESC/192K	33-21-20
DIMMER:			
AFT LUMINAIRE	1	CABIN, ABOVE LIFTS 243DB/JB	*
FWD LUMINAIRE	1	CABIN, ABOVE LIFTS 243DB/JB	*
LIGHT – LUMINAIRE	*	CEILING	33-21-04
PANEL:			
AFT ATTENDANTS	1	PASSENGER COMPT LEFT	*
FWD ATTENDANTS	1	PASSENGER COMPT LEFT	*
RECTIFIER ASSEMBLY:			
AFT LUMINAIRE	1	MESC/192K	33-21-19
FWD LUMINAIRE	1	MESC/192K	33-21-19
RELAY:			
AFT LUMINAIRE DISTRIBUTION K13	1	MESC/192K	*
FWD LUMINAIRE CONTROL K14	1	MESC/192K	*
FWD LUMINAIRE DISTRIBUTION K12	1	MESC/192K	*
LUMINAIRE AFT CONTROL K16	1	MESC/192K	*
LUMINAIRE CONVERSION NO. 1 CONTROL K15	1	MESC/192K	*
LUMINAIRE CONVERSION NO. 2 CONTROL K17	1	MESC/192K	*
SWITCH – FWD LUMINAIRE CONVERSION	1	CABIN, ABOVE LIFTS/243JB	33-21-21
TRANSFORMER:			
AFT LUMINAIRE	1	MESC/192K	33-21-19
FWD LUMINAIRE	1	MESC/192K	33-21-19

*SEE WM EQUIPMENT LIST

(21-000-33-1000)

R
R Luminaire Lights Component Location Index
Figure 101 (Sheet 3)

EFFECTIVITY: 001-031

0016

COMPONENT	QTY	AREA/ACCESS	REFERENCE
CIRCUIT BREAKERS:			
CABIN LIGHTING LUMINAIRE DISTR AFT 1 3399-CB37	1	GALLEY RIGHT CB PNL F11	*
CABIN LIGHTING LUMINAIRE DISTR AFT 2 3399-CB35	1	GALLEY RIGHT CB PNL F12	*
CABIN LIGHTING LUMINAIRE DISTR AFT 3 3399-CB36	1	GALLEY RIGHT CB PNL F13	*
CABIN LIGHTING LUMINAIRE DISTR AFT 4 3399-CB40	1	GALLEY RIGHT CB PNL F14	*
CABIN LIGHTING LUMINAIRE DISTR FWD 1 3399-CB32	1	GALLEY RIGHT CB PNL E11	*
CABIN LIGHTING LUMINAIRE DISTR FWD 2 3399-CB33	1	GALLEY RIGHT CB PNL E12	*
CABIN LIGHTING LUMINAIRE PWR AFT 3321-CB27	1	GALLEY LEFT CB PNL K19	*
CABIN LIGHTING LUMINAIRE PWR FWD 3321-CB28	1	GALLEY LEFT CB PNL K20	*
LIGHTS – LUMINAIRE	*	CEILING	33-21-04
PANEL:			
AFT ATTENDANT	1	PASSENGER COMPT LEFT	33-20-00
FWD ATTENDANT	1	PASSENGER COMPT LEFT	33-20-00
RELAY:			
AFT LUMINAIRE DISTRIBUTION NO. 1 3321-K25	1	MESC, 192K/192EA	*
AFT LUMINAIRE DISTRIBUTION NO. 2 3321-K29	1	MESC, 192K/192EA	*
AFT LUMINAIRE DISTRIBUTION NO. 3 3321-K16	1	MESC, 192K/192EA	*
FWD LUMINAIRE DISTRIBUTION NO. 1 3321-K14	1	MESC, 192K/192EA	*
FWD LUMINAIRE DISTRIBUTION NO. 2 3321-K28	1	MESC, 192K/192EA	*

*SEE WM EQUIPMENT LIST

M1-0000-33-1401

R Luminaire Lights Component Location Index
R Figure 101 (Sheet 3)

COMPONENT	QTY	AREA/ACCESS	REFERENCE
CIRCUIT BREAKERS:			
CABIN LT LUMINAIRE VALENCE CONTROL CROSS AISLE 3321-CB24	1	GALLEY LEFT CB PNL	•
LIGHTING VALANCE DISTR 3321-CB20	1	GALLEY RIGHT CB PNL	•
LIGHTING VALENCE DIM CONT AFT 3321-CB22	1	GALLEY LEFT CB PNL	•
LIGHTING VALENCE DIM CONT FWD 3321-CB21	1	GALLEY LEFT CB PNL	•
DIMMER:			
AFT VALENCE LTS	1	ABOVE LIFTS/243DB/JB	33-21-20
FORWARD VALENCE LTS	1	ABOVE LIFTS/243DB/JB	33-21-20
LIGHT – VALENCE	*	MOUNTED ON SIDEWALL ABOVE EACH WINDOW	33-21-00
PANEL:			
AFT ATTENDANTS CONTROL	1	PASSENGER COMPT LEFT	•
FWD ATTENDANTS CONTROL	1	PASSENGER COMPT LEFT	•
RECTIFIER ASSEMBLY – VALENCE & CROSS AISLE	1	MESC/192K	33-21-10
RELAY:			
AFT SIDEWALL LIGHTS CONTROL 3321-K18	1	MESC/192K	•
FWD SIDEWALL LIGHTS CONTROL 3321-K19	1	MESC/192K	•
FWD SIDEWALL LTS DISTRIBUTION 3321-K1	1	MESC/192K	•
SIDEWALL LIGHTS CONTROL 3321-K3	1	ABOVE LIFTS/243DB/JB	•
SIDEWALL LIGHTS CONVERSION 3321-K2	1	MESC/192K	•
SWITCH – SIDEWALL VALENCE CONVERSION	1	ABOVE LIFTS/243DB/JB	33-21-21

*SEE WM EQUIPMENT LISY

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Valance Lights Component Location Index
Figure 101 (Sheet 4)

EFFECTIVITY: 001-031

001B

COMPONENT	QTY	AREA/ACCESS	REFERENCE
CIRCUIT BREAKERS:			
CABIN LIGHTING VAL CONT 3321-CB24	1	GALLEY LH CB PNL K21	*
LIGHTING VALENCE DISTR AFT LH 3321-CB20	1	GALLEY LH CB PNL F14	*
LIGHTING VALENCE DISTR AFT RH 3321-CB21	1	GALLEY LH CB PNL F15	*
LIGHTING VALENCE DISTR FWD 3321-CB22	1	GALLEY LH CB PNL F13	*
LIGHT – VALENCE	*	MOUNTED ON SIDEWALL ABOVE EACH WINDOW	~~33-21-00~~
PANEL:			
AFT ATTENDANTS	1	PASSENGER COMPT LEFT	*
FWD ATTENDANTS	1	PASSENGER COMPT LEFT	*
RELAY – FWD SIDEWALL LTS DIST. 3321-K1	1	MESC/152K	*

*SEE WM EQUIPMENT LIST

M1-0000-33-1402

R Valance Lights Component Location Index
R Figure 1C1 (Sheet 4)

COMPONENT	QTY	AREA/ACCESS	REFERENCE
CIRCUIT BREAKERS:			
LIGHTING GALLEY 1 3321-CB1	1	GALLEY LEFT CB PNL	*
SVCE CTR AFT 2534-CB23	1	GALLEY LEFT CB PNL	*
SVCE CENTER BVGE BAR FWD 2534-CB14	1	GALLEY LEFT CB PNL	*
LIGHT:			
FLUORESCENT	1	FWD SATELLITE SERVICE CENTER	33-21-26
FLUORESCENT, UPPER	3	MID-AFT SERVICE CENTER (UPPER)	33-21-27
LH MID SERVICE CENTER	1	LH MID SERVICE CENTER	33-21-27
RH MID SERVICE CENTER	1	RH MID SERVICE CENTER	33-21-29
LIGHT ASSEMBLY:			
FLUORESCENT, LOWER	2	MID AFT SERVICE CENTER (LOWER)	33-21-31
LH BEVERAGE BAR	1	FWD BEVERAGE BAR	33-21-24
RH BEVERAGE BAR	1	FWD BEVERAGE BAR	33-21-24
PANEL:			
CONTROL	1	FWD BEVERAGE BAR	*
CONTROL		FWD SATELLITE SERVICE CENTER	*
CONTROL, LOWER	1	MID AFT SERVICE CENTER (LOWER)	25-34-02
CONTROL, UPPER	1	MID AFT SERVICE CENTER (UPPER)	25-34-02

*SEE WM EQUIPMENT LIST

M1-0000-33 1322

R Buffet Lights Component Location Index
R Figure 101 (Sheet 5)

EFFECTIVITY: ALL

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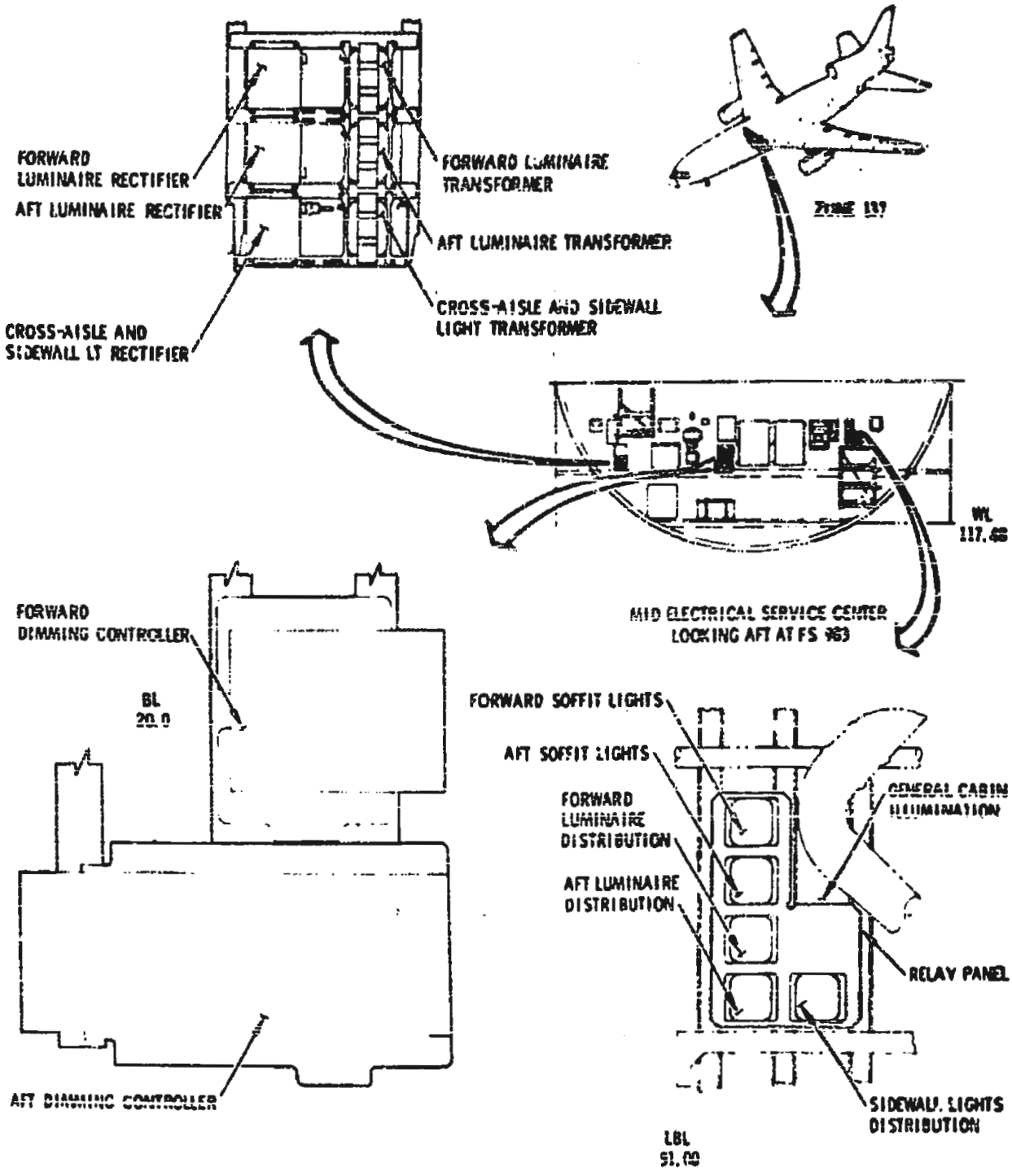

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Component Locator Diagram
Figure 102 (Sheet 1)

EFFECTIVITY: 001-031

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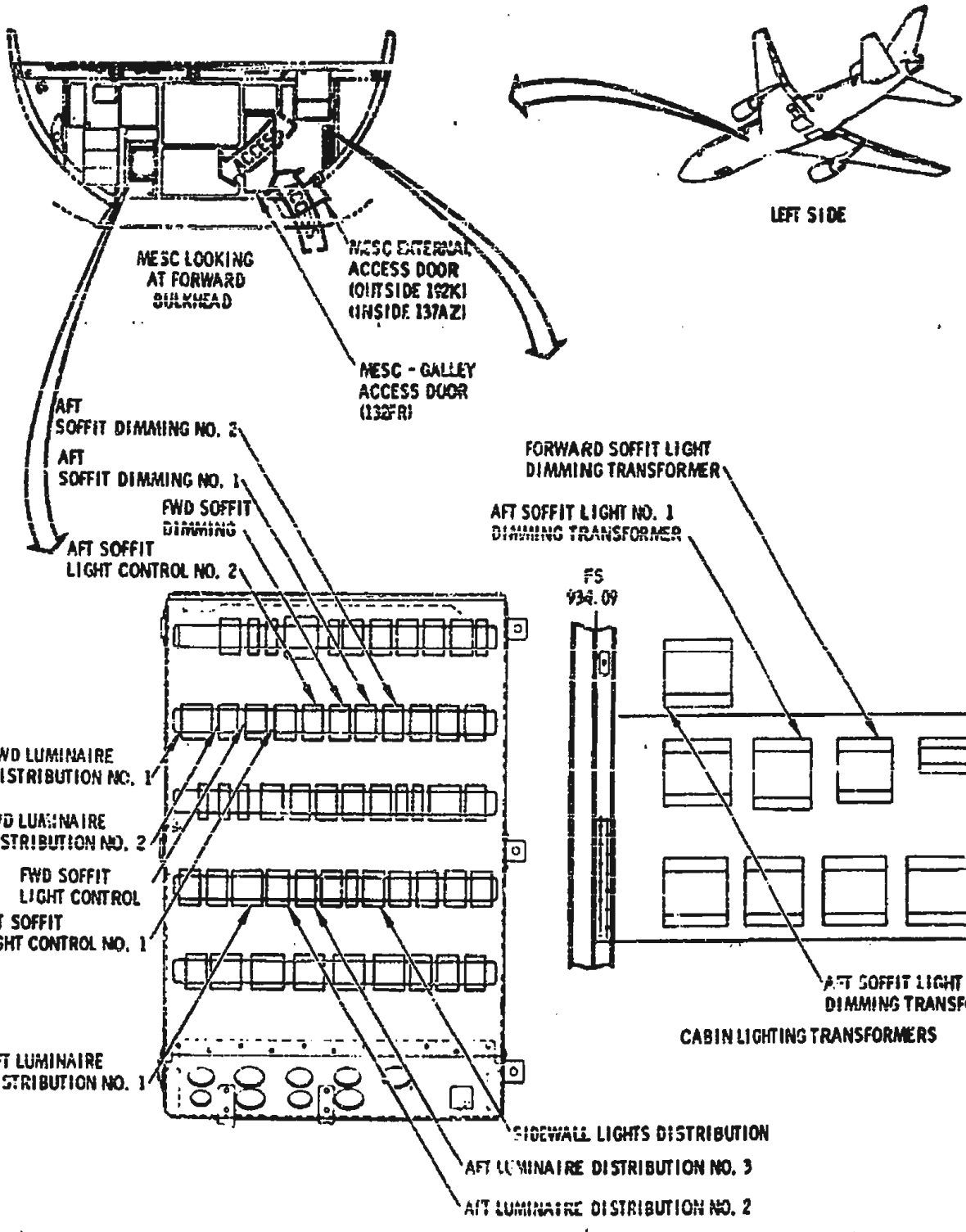
LEFT SIDE
MESC LOOKING AT FORWARD BULKHEAD
MESC EXTERNAL ACCESS DOOR (OUTSIDE 192K) (INSIDE 137AZ)
MESC - GALLEY ACCESS DOOR (132FR)
AFT SOFFIT DIMMING NO. 2
AFT SOFFIT DIMMING NO. 1
FWD SOFFIT DIMMING
AFT SOFFIT LIGHT CONTROL NO. 2
FORWARD SOFFIT LIGHT DIMMING TRANSFORMER
AFT SOFFIT LIGHT NO. 1 DIMMING TRANSFORMER
FS 934.09
FS 963.09
FWD LUMINAIRE DISTRIBUTION NO. 1
FWD LUMINAIRE DISTRIBUTION NO. 2
FWD SOFFIT LIGHT CONTROL
AFT SOFFIT LIGHT CONTROL NO. 1
AFT LUMINAIRE DISTRIBUTION NO. 1
AFT SOFFIT LIGHT NO. 2 DIMMING TRANSFORMER
CABIN LIGHTING TRANSFORMERS
SIDEWALL LIGHTS DISTRIBUTION
AFT LUMINAIRE DISTRIBUTION NO. 3
AFT LUMINAIRE DISTRIBUTION NO. 2

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Component Locator Diagram
Figure 102 (Sheet 1)

EFFECTIVITY: 032-999

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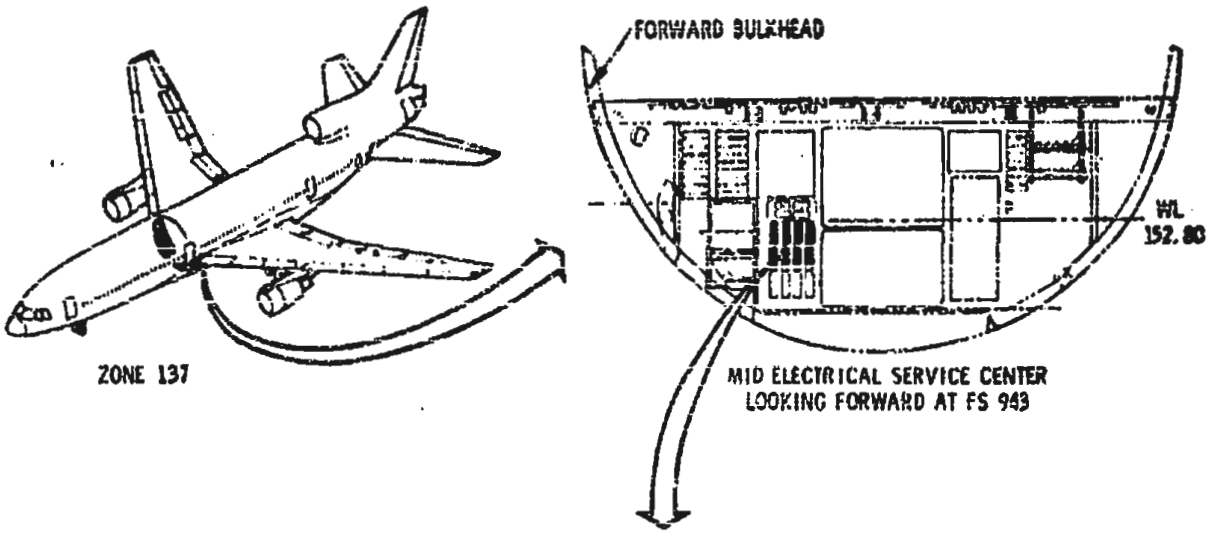

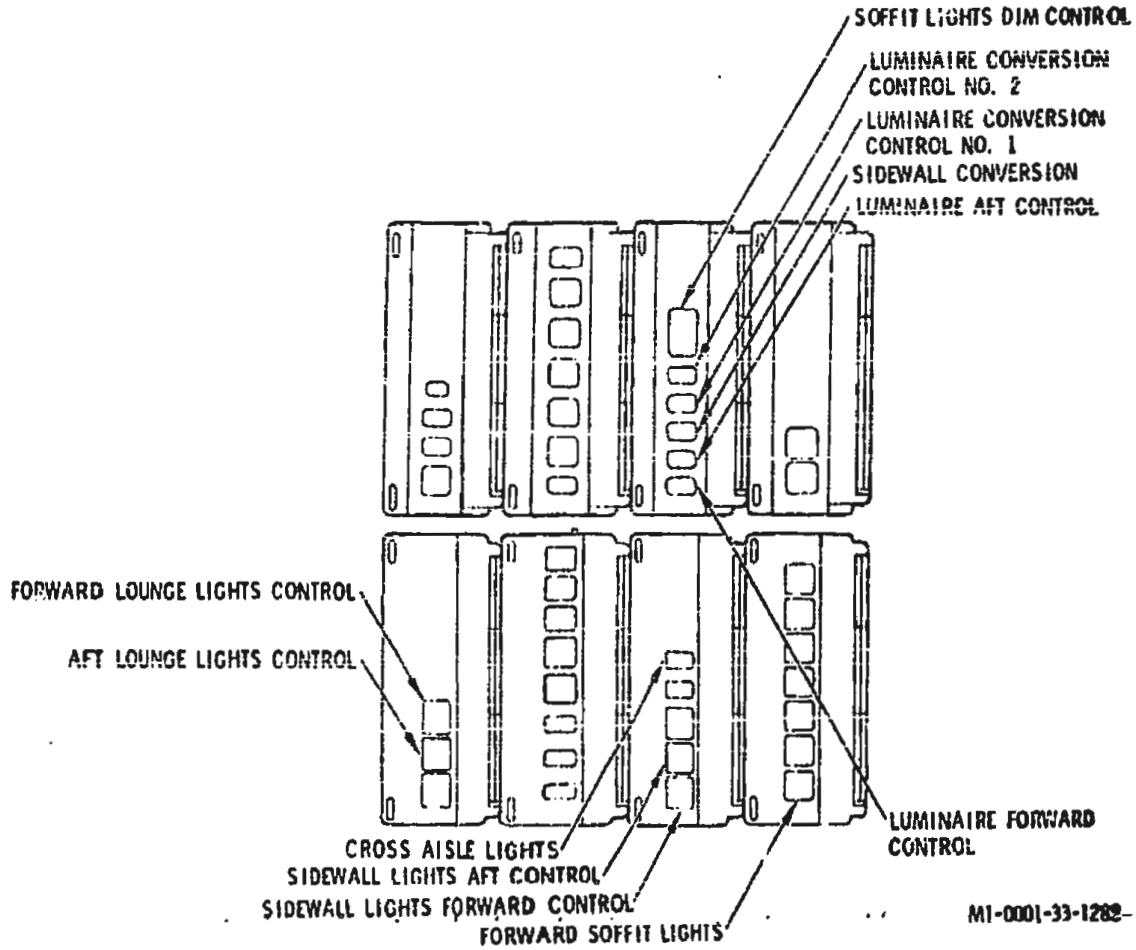

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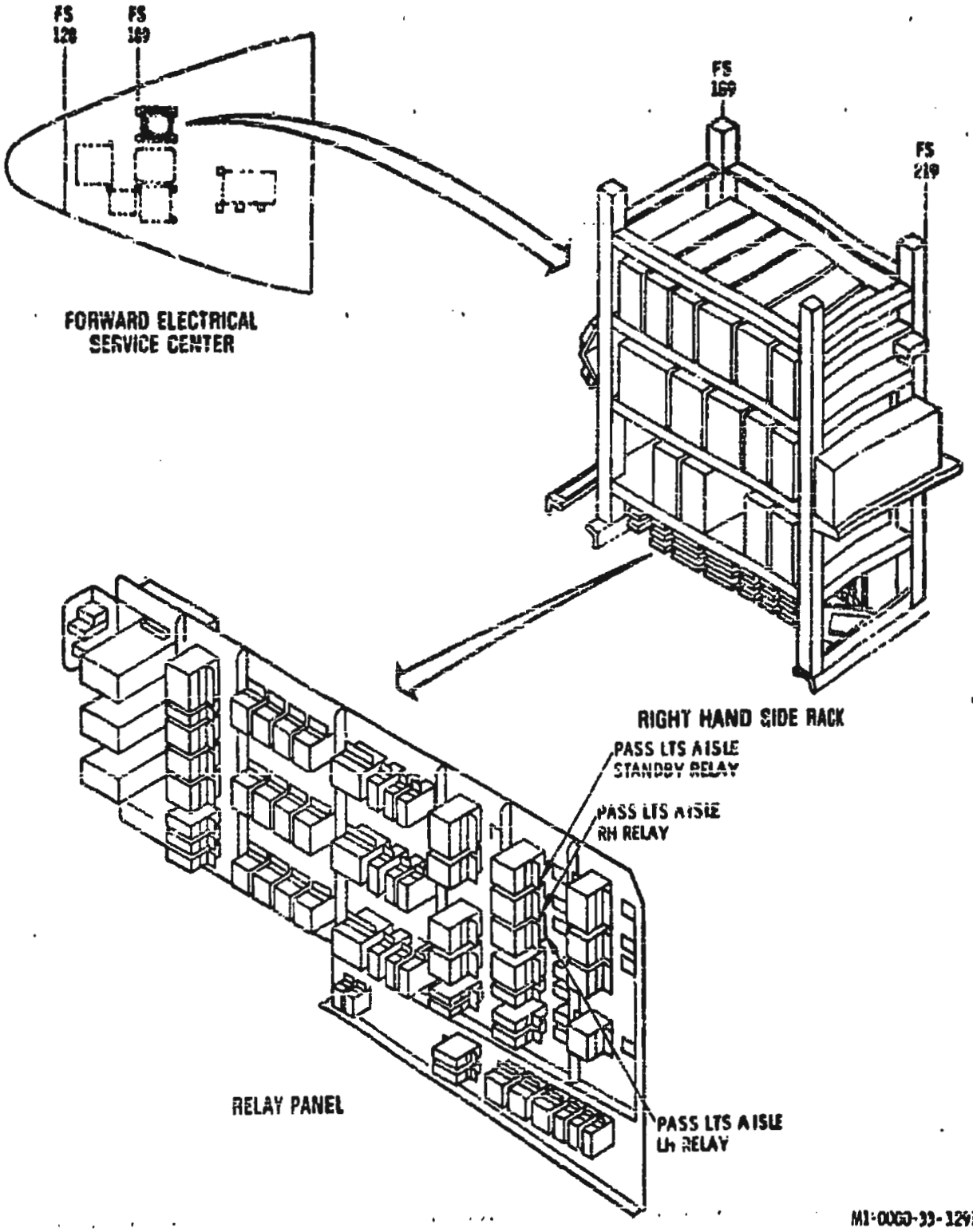
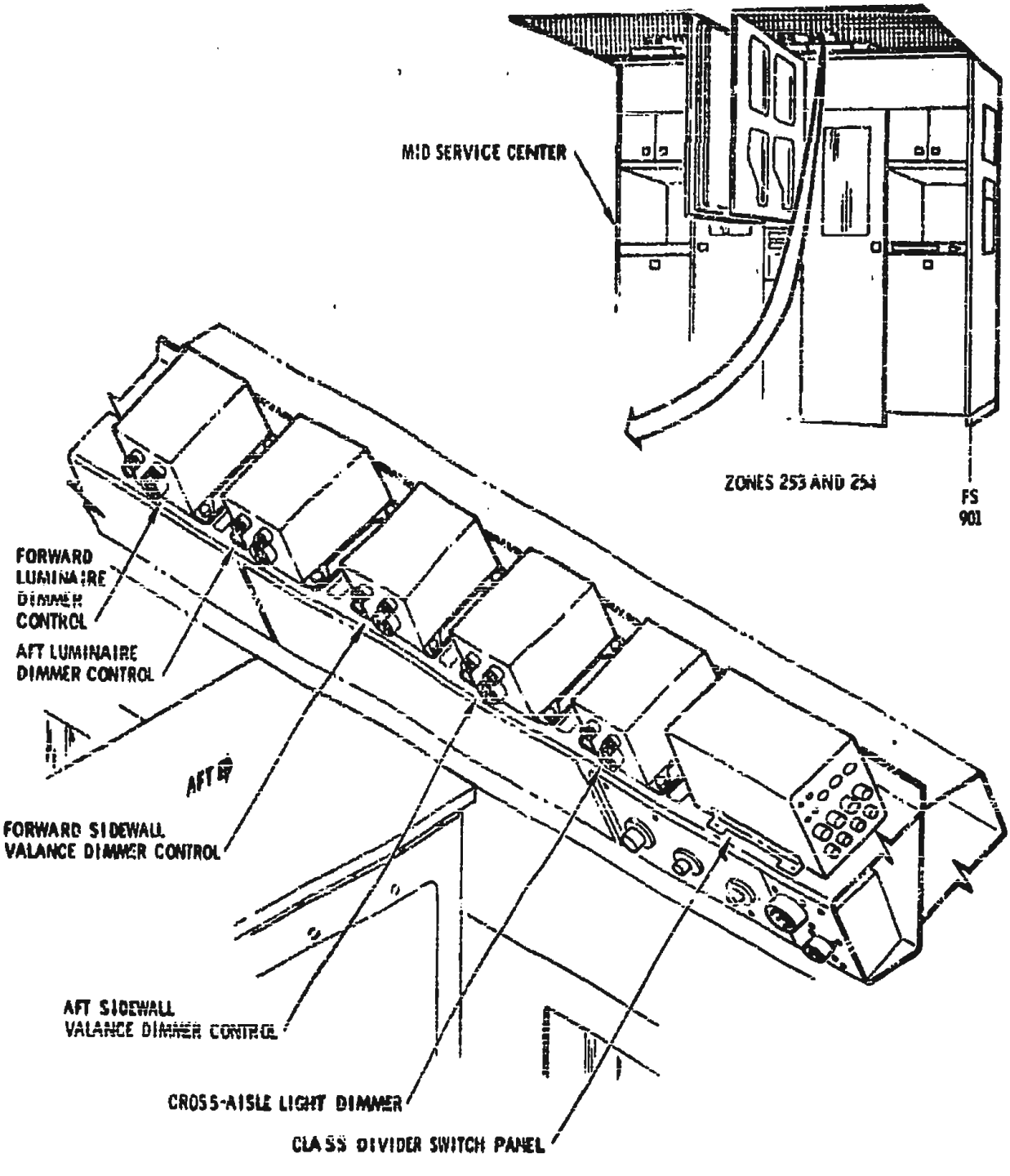
Component Locator Diagram
Figure 102 (Sheet 2)



Component Locator Diagram
Figure 102 (Sheet 3)



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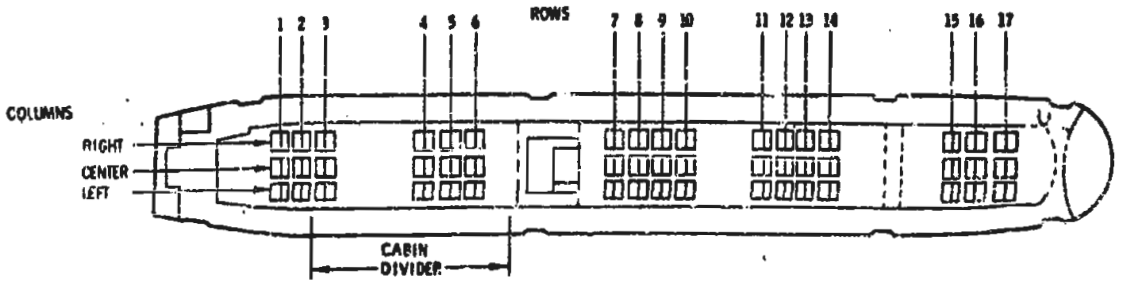
R Component Locator Diagram
R Figure 102 (Sheet 4)

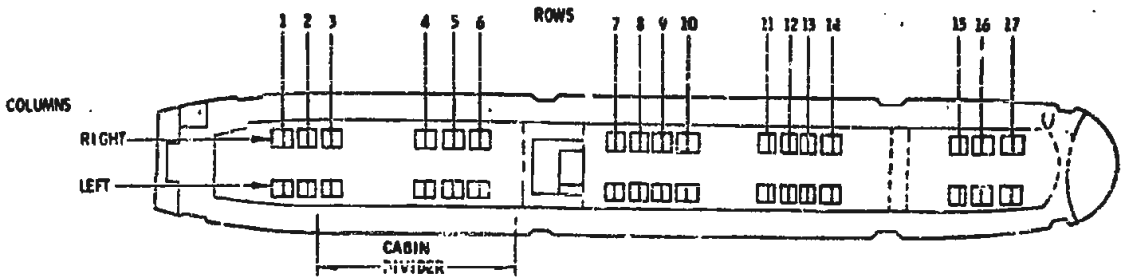
R EFFECTIVITY: ALL



MALFUNCTION	CHECK AND FIX IN ORDER OF PROBABILITY
ALL LIGHTS OUT	LEFT GALLEY CB PANEL CB K19 POWER INPUT FUSES ON FWD AND AFT LUMINAIRE T/RS (IF FUSES CONTINUE TO BLOW, REPLACE T/R)
ROWS 1-9 IN ALL COLS OUT	POWER INPUT FUSES ON FWD T/R (IF FAULT PERSISTS REPLACE T/R) RIGHT GALLEY CB PANEL CB F11 FWD LUMINAIRE POWER DISTRIBUTION RELAY
GROUP (1, 2, 3), (4, 5, 6), (7, 8, 9) IN ANY COL OUT	POWER OUTPUT FUSE ON FWD T/R
ROWS 10-17 IN ALL COLS OUT	POWER INPUT FUSES ON AFT T/R (IF FAULT PERSISTS REPLACE T/R) RIGHT GALLEY CB PANEL CB F14 AFT LUMINAIRE POWER DISTRIBUTION RELAY
GROUP (10, 11, 12), (13, 14), (15, 16, 17) IN ANY COL OUT	POWER OUTPUT FUSE ON AFT T/R
ALL LIGHTS FORWARD OF CABIN DIVIDER OUT	FWD LUMINAIRE DIMMER UNIT INPUT POWER FUSE F1 RIGHT GALLEY CB PANEL CB E11 FWD LUMINAIRE CONTROL RELAY
ALL LIGHTS AFT OF CABIN DIVIDER OUT	AFT LUMINAIRE DIMMER UNIT INPUT POWER FUSE F1 RIGHT GALLEY CB PANEL CB E12 AFT LUMINAIRE CONTROL RELAY
ROWS 1 & 2 ALL COLS OUT	FWD LUMINAIRE DIMMER UNIT OUTPUT FUSE F3
ALL COLS, ROWS 3-6 FORWARD OF CABIN DIVIDER OUT	FWD LUMINAIRE DIMMER UNIT OUTPUT FUSE F2
ALL COLS, ROWS 3-6 AFT OF CABIN DIVIDER OUT	AFT LUMINAIRE DIMMER UNIT OUTPUT FUSE F2
LEFT COL, ROWS 7-17 OUT	AFT LUMINAIRE DIMMER UNIT OUTPUT FUSE F4
CENTER & RIGHT COLS ROWS 7-17 OUT	AFT LUMINAIRE DIMMER UNIT OUTPUT FUSE F3
NO DIMMING OF LUMINAIRES FWD OF CABIN DIVIDER	CHECK FWD SOFFITS FOR DIMMING FUNCTION. OKAY SWOP LUMINAIRE DIMMER UNITS, IF FAULT TRANSFERS REPLACE FAULTY DIMMER UNIT. NOT OKAY CHECK GALLEY LEFT CB PANEL CB G17, IF OKAY REPLACE FWD VARIAC UNIT
NO DIMMING OF LUMINAIRES AFT OF CABIN DIVIDER	CHECK AFT SOFFITS FOR DIMMING FUNCTION OKAY SWOP LUMINAIRE DIMMER UNITS, IF FAULT TRANSFERS REPLACE FAULTY DIMMER UNIT NOT OKAY CHECK GALLEY LEFT CB PANEL CB G16, IF OKAY REPLACE AFT VARIAC UNIT

M1-0001-33-1522

R Luminaire Lights Fault Isolation Guide
R Figure 103



MALFUNCTION	CHECK AND FIX IN ORDER OF PROBABILITY
ALL LIGHTS OUT	LEFT GALLEY CB PANEL CB K19 AND K20 FWD AND AFT ATTENDANT DIMMER CONTROLLER
ROW 1 IN ALL COLS OUT	RIGHT GALLEY CB PANEL CB E11 LUMINAIRE DISTRIBUTION FWD 1
ROWS 2-6 IN ALL COLS OUT	RIGHT GALLEY CB PANEL CB E12 LUMINAIRE DISTRIBUTION FWD 2
ROWS 7-10 IN ALL COLS OUT	RIGHT GALLEY CB PANEL CB F11 LUMINAIRE DISTRIBUTION AFT 1
ROWS 11-12 IN ALL COLS OUT	RIGHT GALLEY CB PANEL CB F12 LUMINAIRE DISTRIBUTION AFT 2
ROWS 13-14 IN ALL COLS OUT	RIGHT GALLEY CB PANEL CB F13 LUMINAIRE DISTRIBUTION AFT 3
ROWS 15-17 IN ALL COLS OUT	RIGHT GALLEY CB PANEL CB F14 LUMINAIRE DISTRIBUTION AFT 4
NO DIMMING OF LUMINAIRES FWD OF CABIN DIVIDER	CHECK FWD DIMMER CONTROL AND LEFT GALLEY CB PANEL CB K19. IF FAULT PERSISTS REPLACE DIMMER CONTROLLER
NO DIMMING OF LUMINAIRES AFT OF CABIN DIVIDER	CHECK AFT DIMMER CONTROL AND LEFT GALLEY CB PANEL CB K20. IF FAULT PERSISTS REPLACE DIMMER CONTROLLER
ONE LIGHT IN ANY ROW OUT	CHECK LIGHT AND BALLAST UNIT. IF FAULT PERSISTS REPLACE BALLAST UNIT

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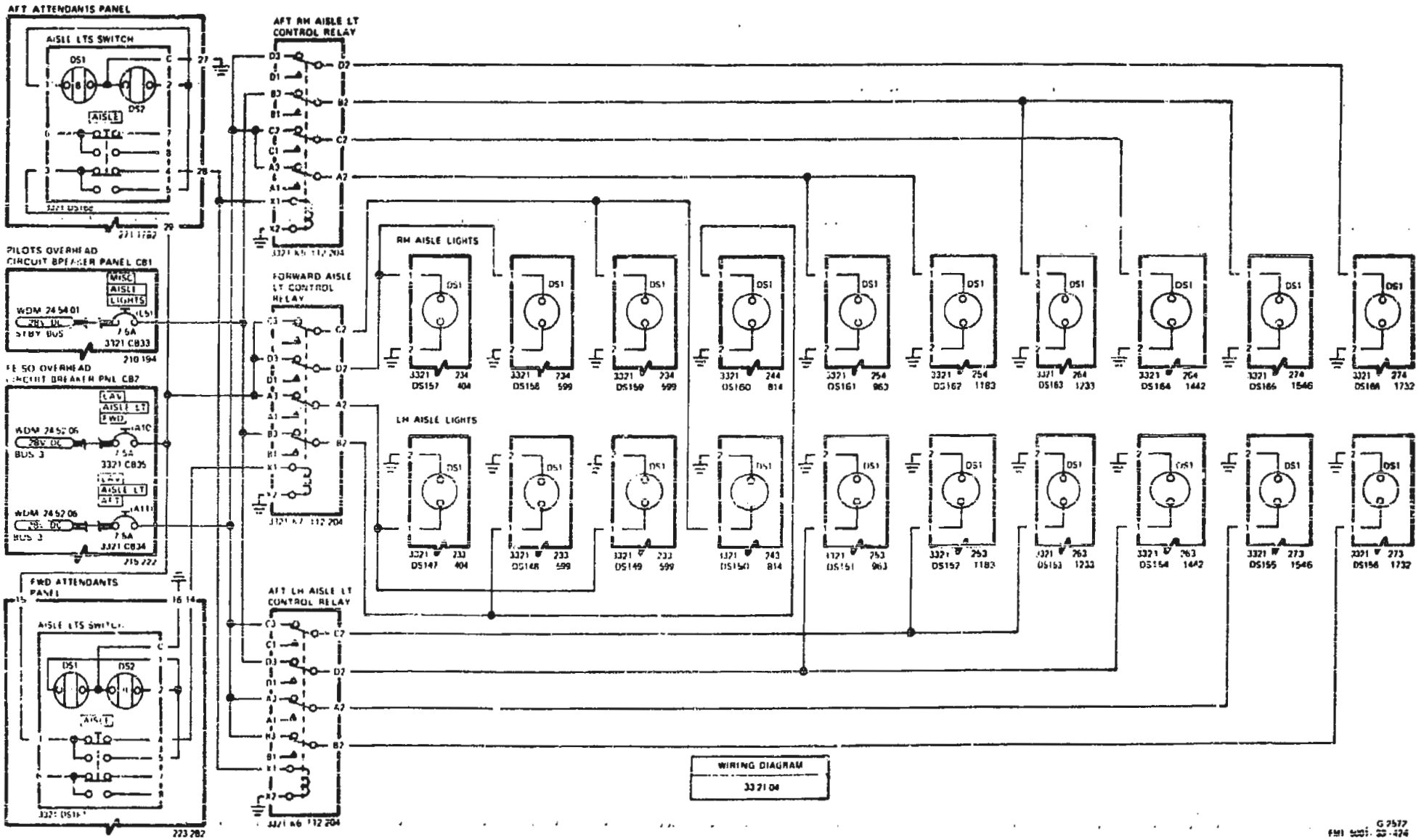
R Luminaire Lights Fault Isolation Guide
R Figure 103



Aisle Lights Schematic
SCHEM 1

R EFFECTIVITY: ALL
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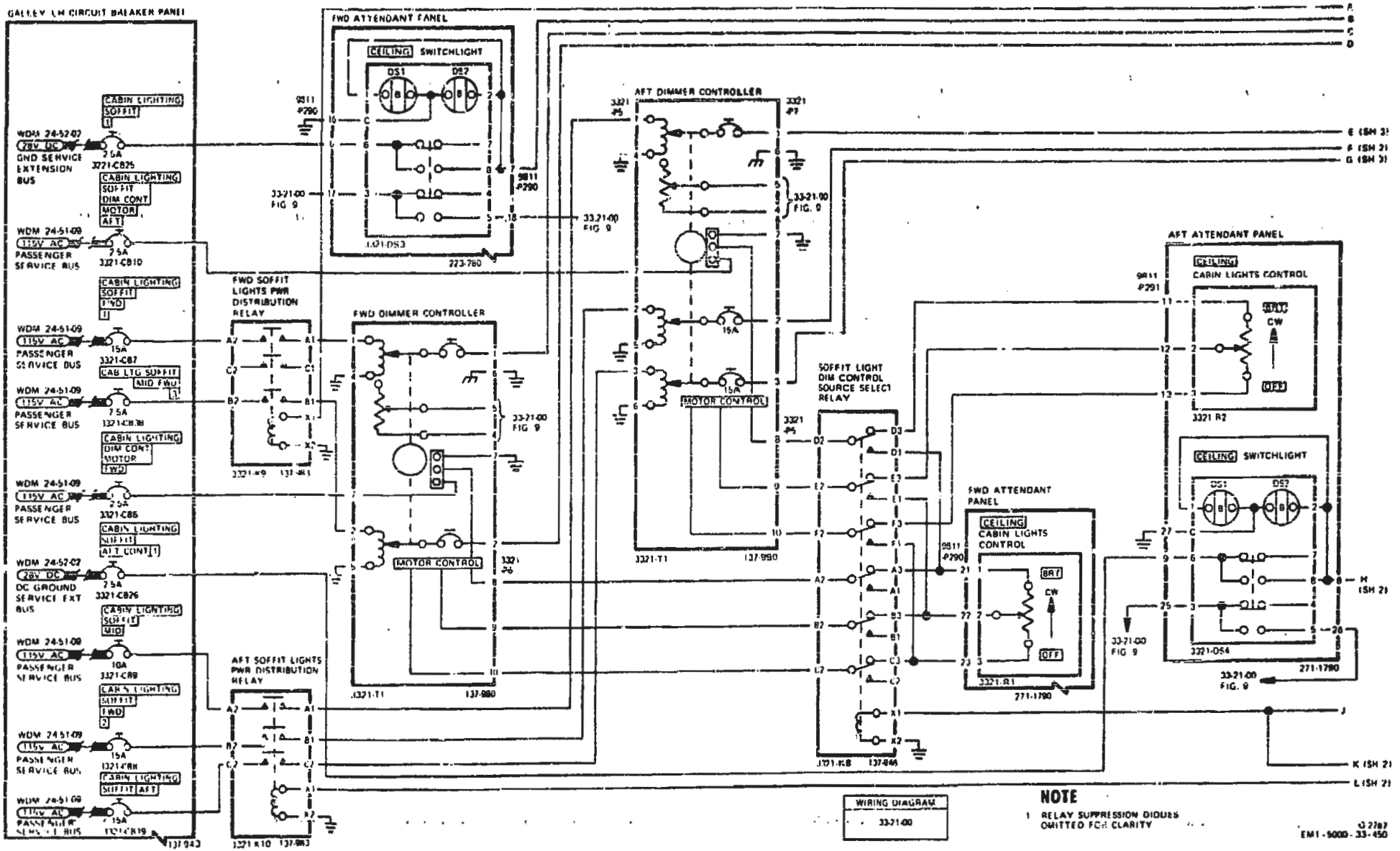

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Soffit Lights Schematic
SCHEM 2 (Sheet 1)

EFFECTIVITY: 001-031

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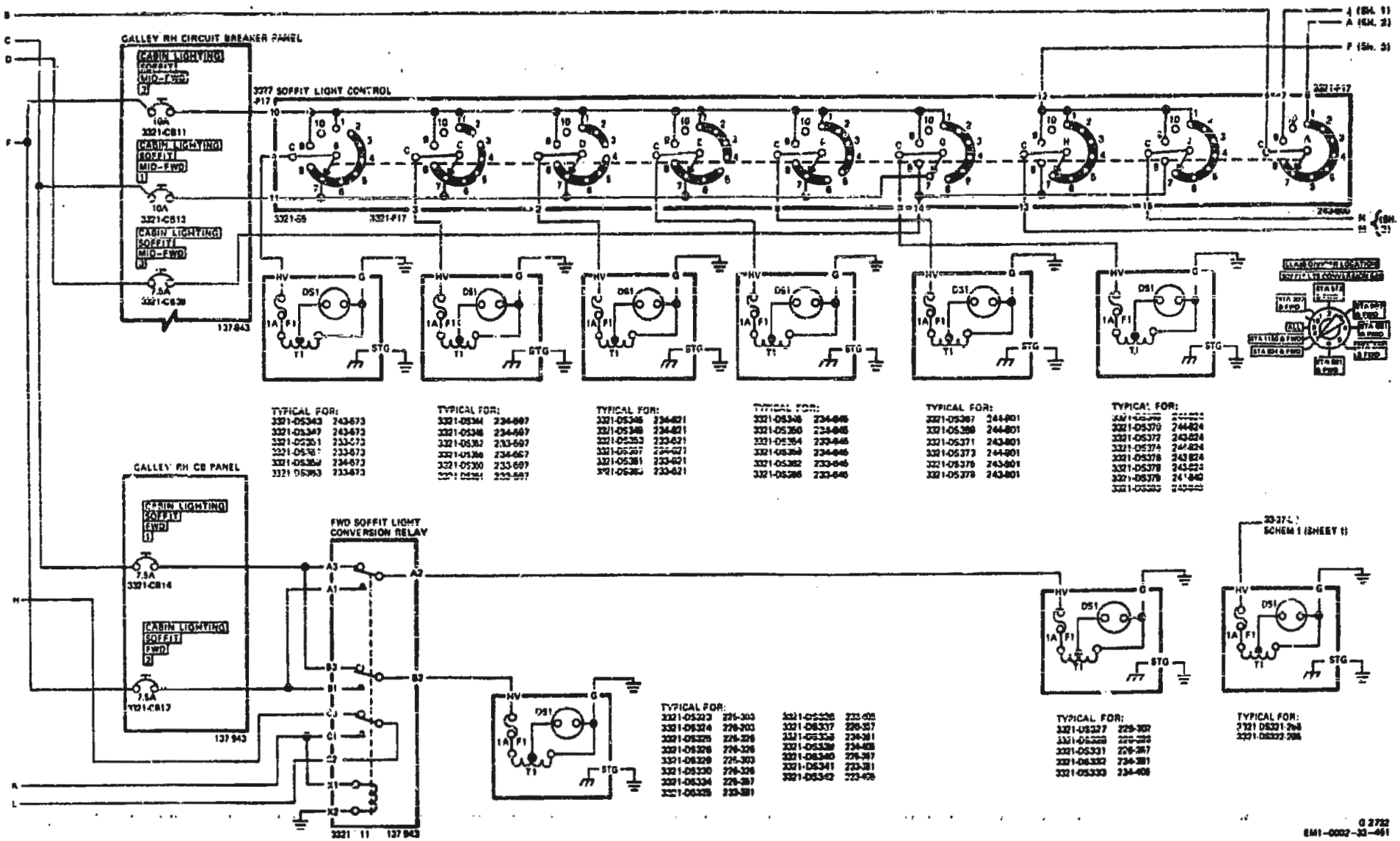

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Soffit Lights Schematic
SCHEM 2 (Sheet 2)

EFFECTIVITY: 001-031

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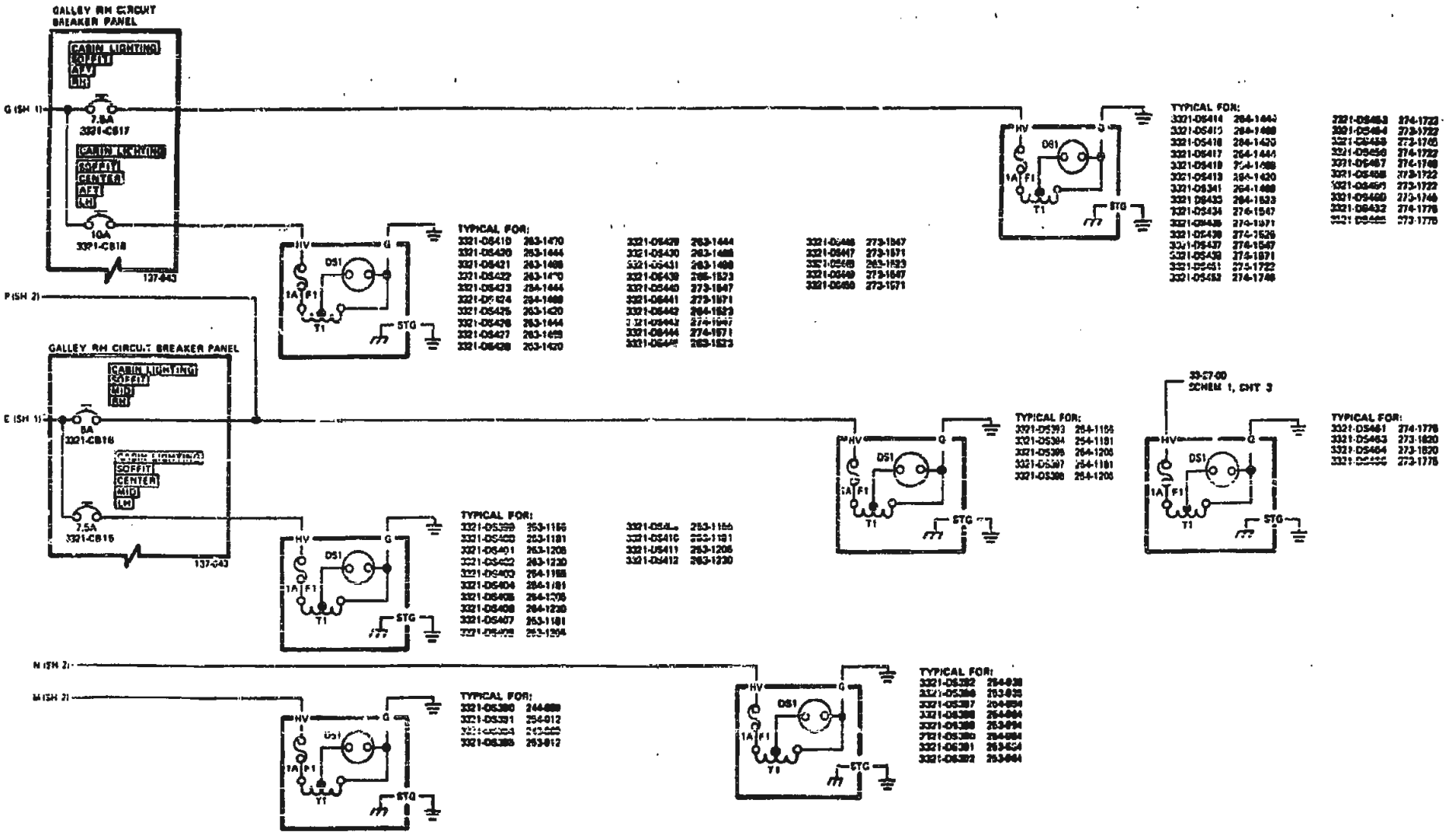

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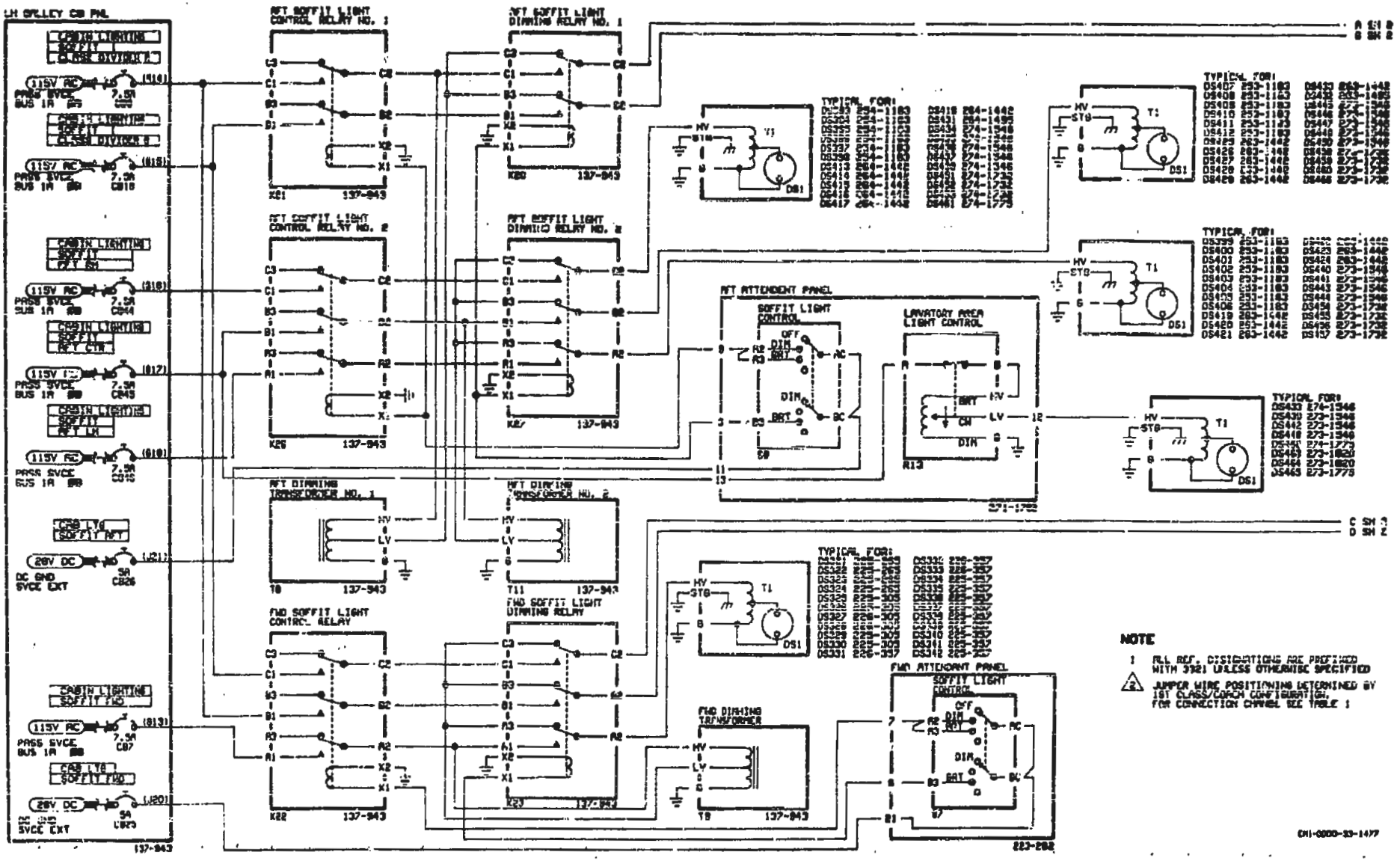
Soffit Lights Schematic
SCHEM 2 (Sheet 3)

EFFECTIVITY: 001-031

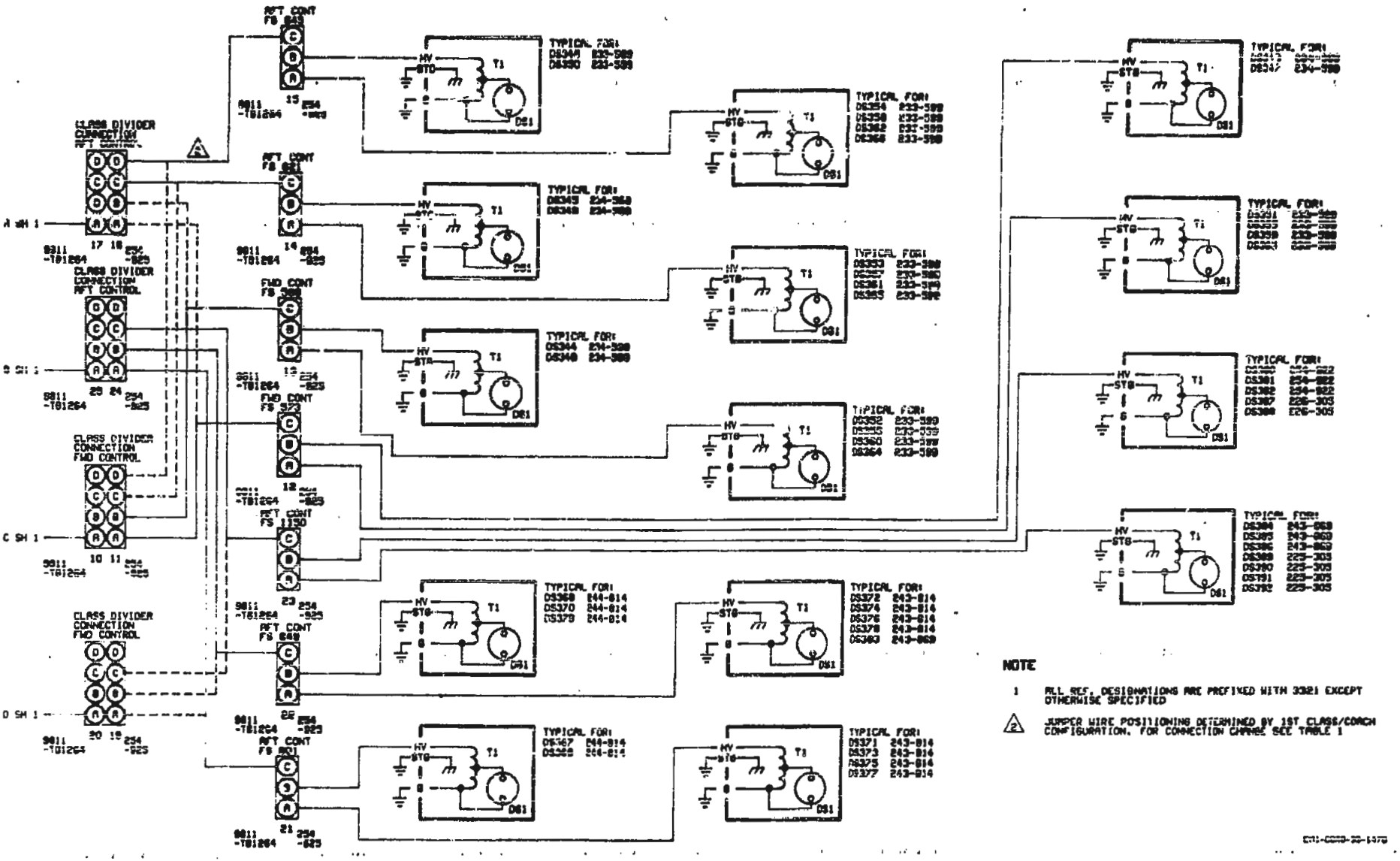
001B


LH GALLEY CB PNL
AFT SOFFIT LIGHT CONTROL RELAY NO. 1
AFT SOFFIT LIGHT DIMMING RELAY NO. 1
AFT SOFFIT LIGHT CONTROL RELAY NO. 2
AFT SOFFIT LIGHT DIMMING RELAY NO. 2
AFT ATTENDANT PANEL
SOFFIT LIGHT CONTROL
LAVATORY AREA LIGHT CONTROL
AFT DIMMING TRANSFORMER NO. 1
AFT DIMMING TRANSFORMER NO. 2
FWD SOFFIT LIGHT CONTROL RELAY
FWD SOFFIT LIGHT DIMMING RELAY
FWD DIMMING TRANSFORMER
FWD ATTENDANT PANEL
SOFFIT LIGHT CONTROL
TYPICAL FOR
NOTE
1 ALL REF. DESIGNATIONS ARE PREFIXED WITH 3321 UNLESS OTHERWISE SPECIFIED
2 JUMPER WIRE POSITIONING DETERMINED BY 1ST CLASS/COACH CONFIGURATION. FOR CONNECTION CHANNEL SEE TABLE I

R Soffit Lights Schematic
R SCHEM 2 (Sheet 1)

EFFECTIVITY: 032-999

0018



NOTE

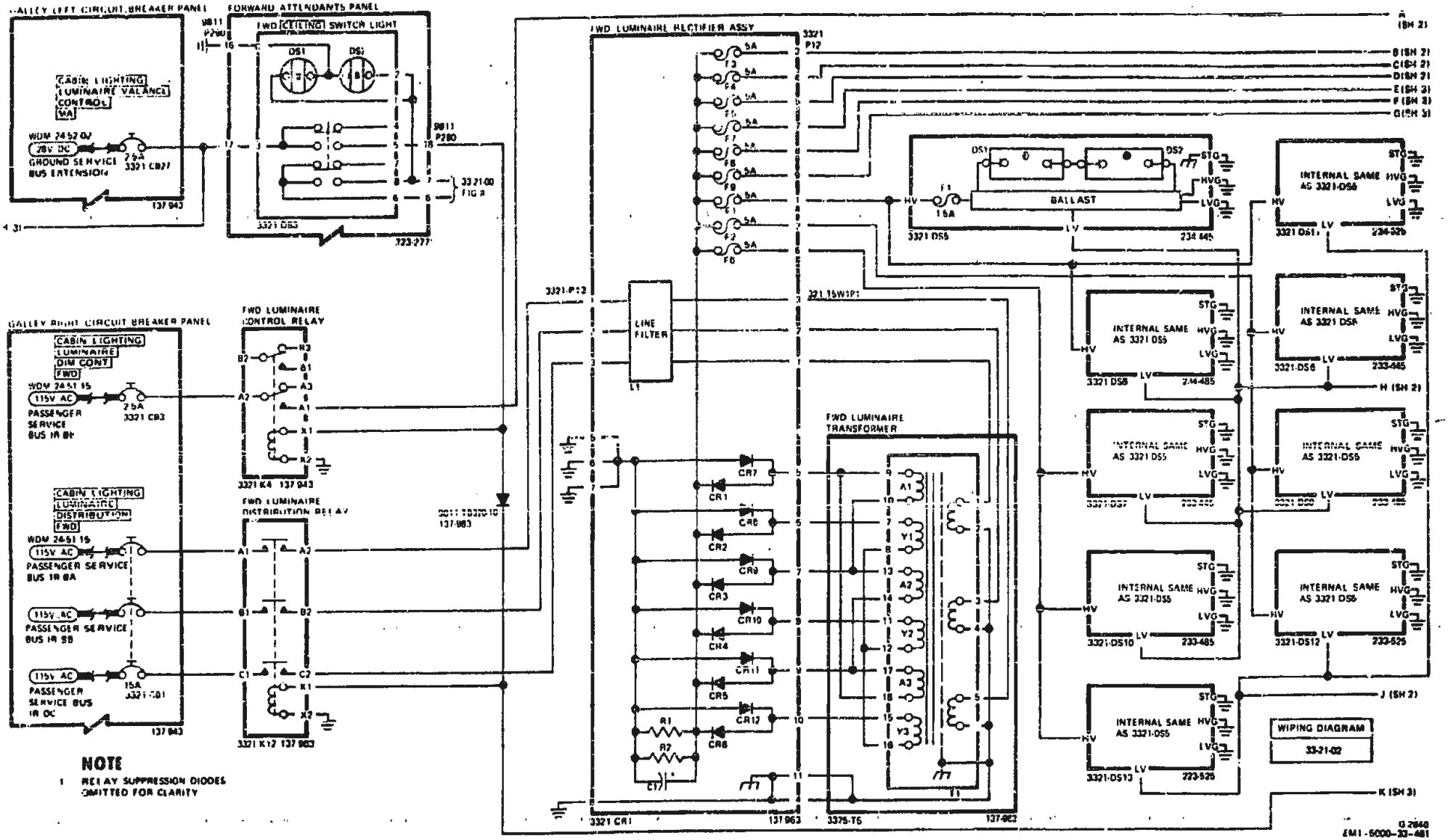
1. ALL REF. DESIGNATIONS ARE PREFIXED WITH 3321 EXCEPT OTHERWISE SPECIFIED
2. JUMPER WIRE POSITIONING DETERMINED BY 1ST CLASS/COACH CONFIGURATION. FOR CONNECTION CHANGE SEE TABLE 1

R
R

Soffit Lights Schematic
SCHEM 2 (Sheet 2)

EFFECTIVITY: 032-999

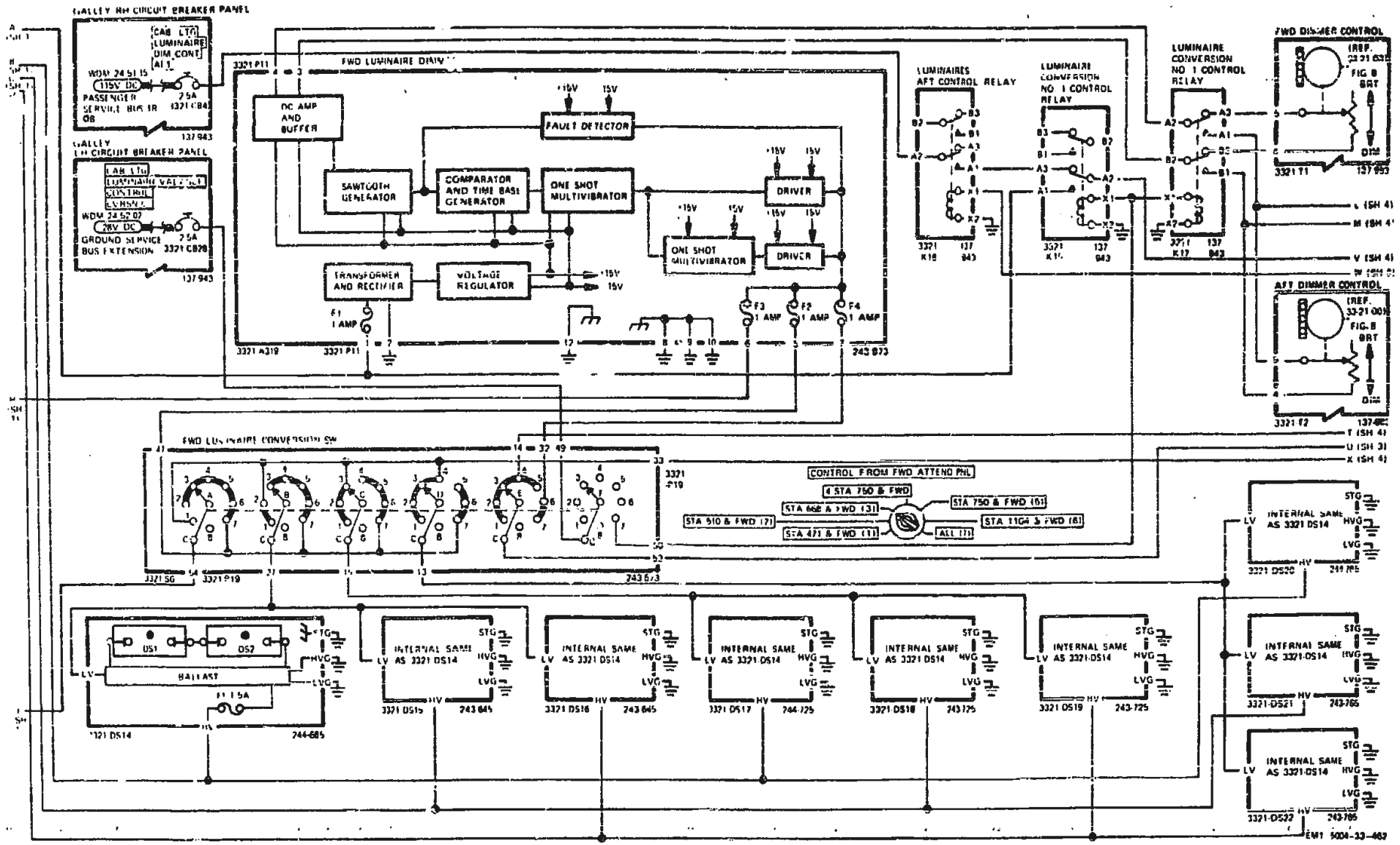
0018



R Luminaire Lights Schematic
R SCHEM 3 (Sheet 1)

EFFECTIVITY: 001-031

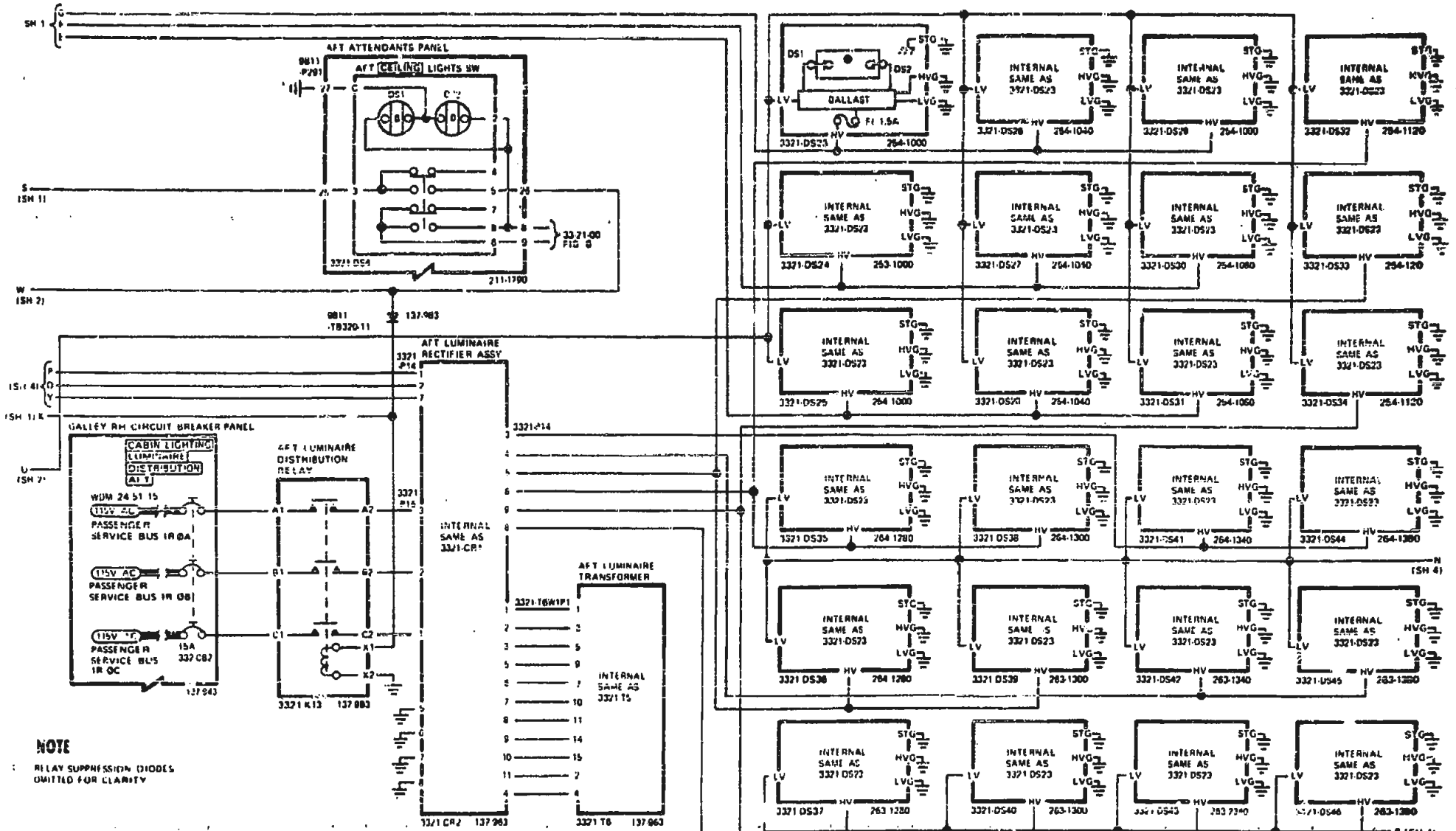
0018



R Luminaire Lights Schematic
R SCHEM 3 (Sheet 2)

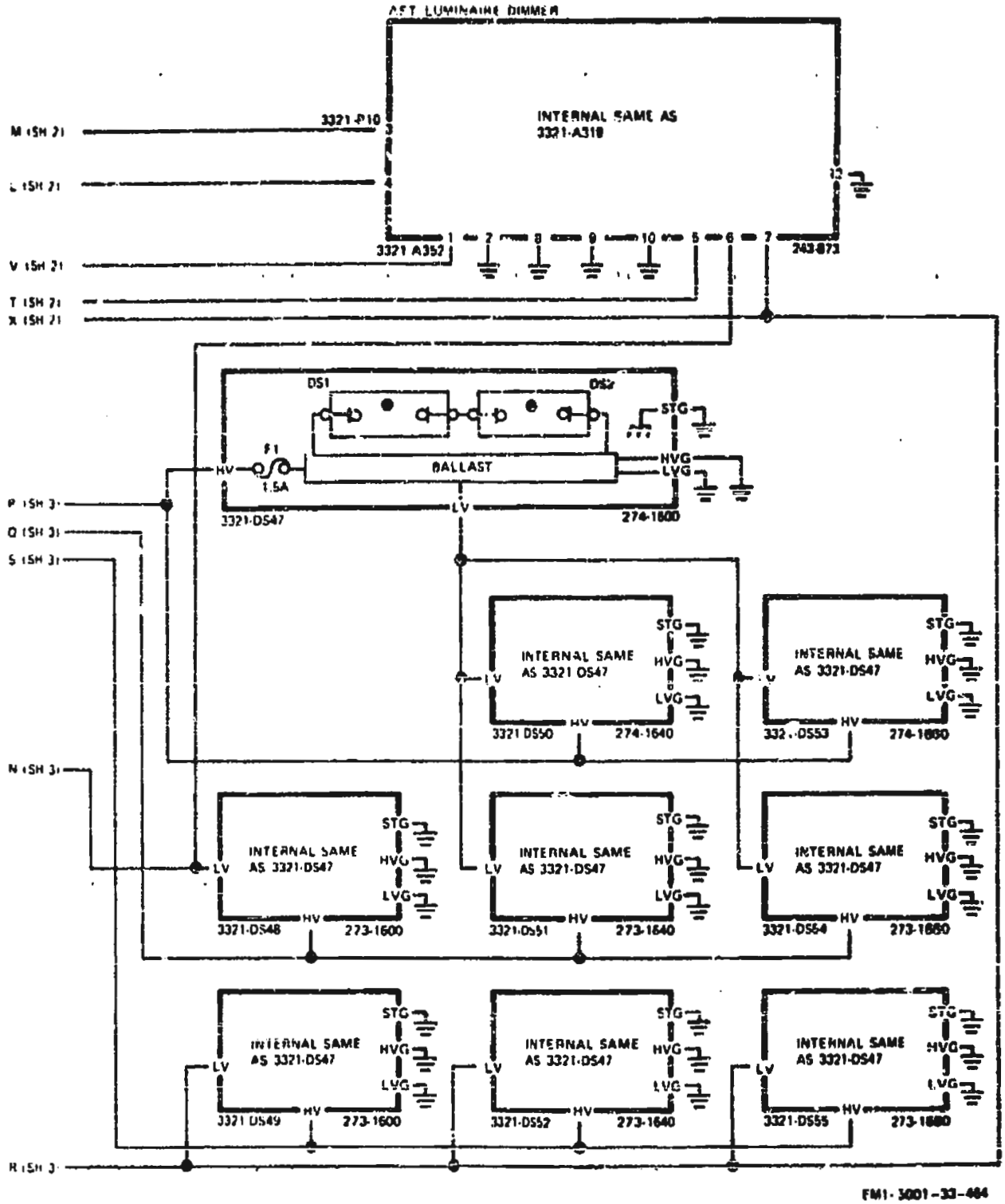
EFFECTIVITY: 001-031

001A


AFT ATTENDANTS PANEL
AFT CEILING LIGHTS SW
AFT LUMINAIRE RECTIFIER ASSY
GALLEY RH CIRCUIT BREAKER PANEL
CABIN LIGHTING LUMINAIRE DISTRIBUTION
AFT LUMINAIRE DISTRIBUTION RELAY
PASSENGER SERVICE BUS IR 0A
PASSENGER SERVICE BUS IR 0B
PASSENGER SERVICE BUS IR 0C
AFT LUMINAIRE TRANSFORMER
BALLAST
INTERNAL SAME AS 3321-DS23
INTERNAL SAME AS 3321 CR1
INTERNAL SAME AS 3321 T5
NOTE
RELAY SUPPRESSION DIODES OMITTED FOR CLARITY

Luminaire Lights Schematic
SCHEM 3 (Sheet 3)

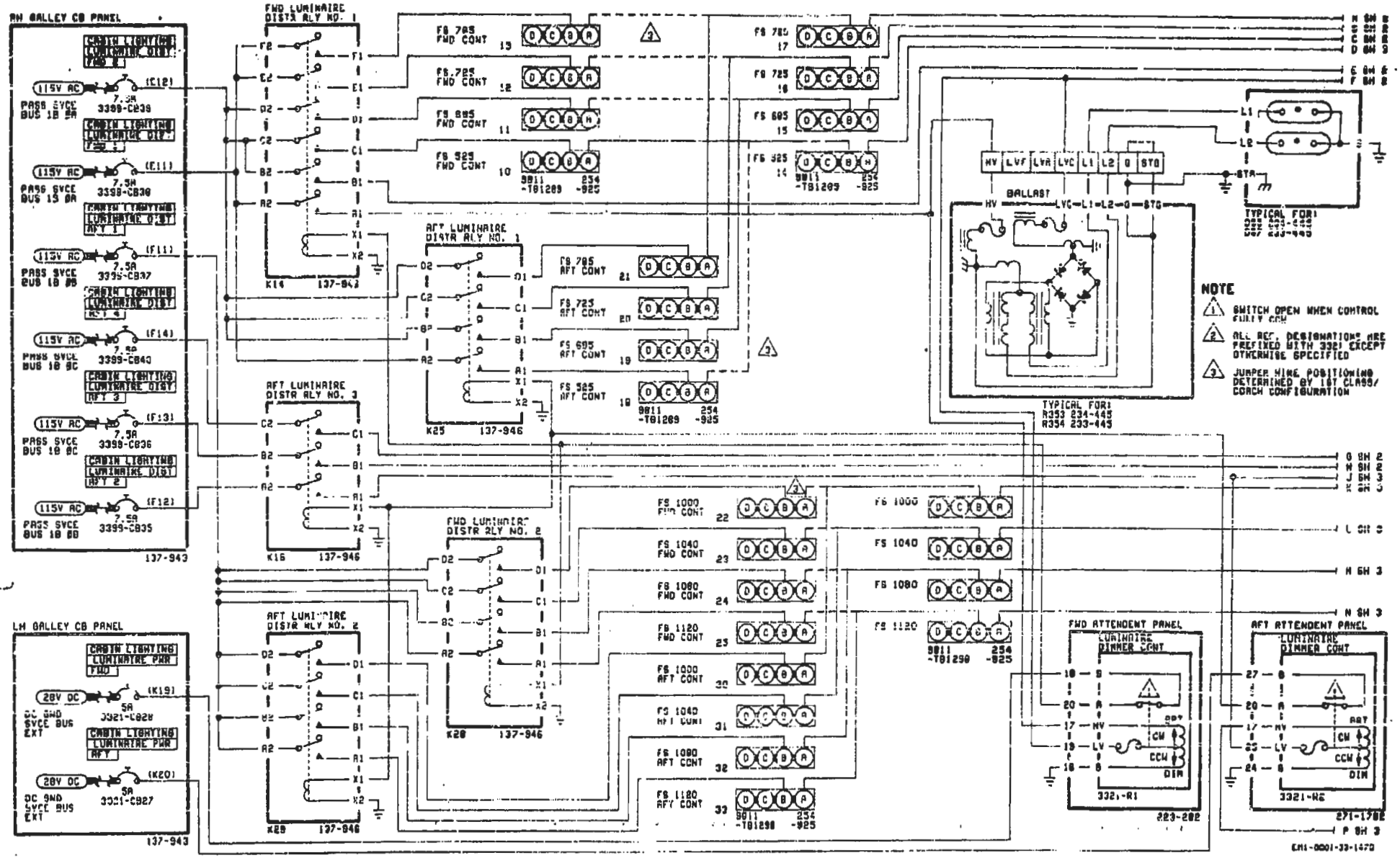
EFFECTIVITY: 001-031



FM1-3001-33-484

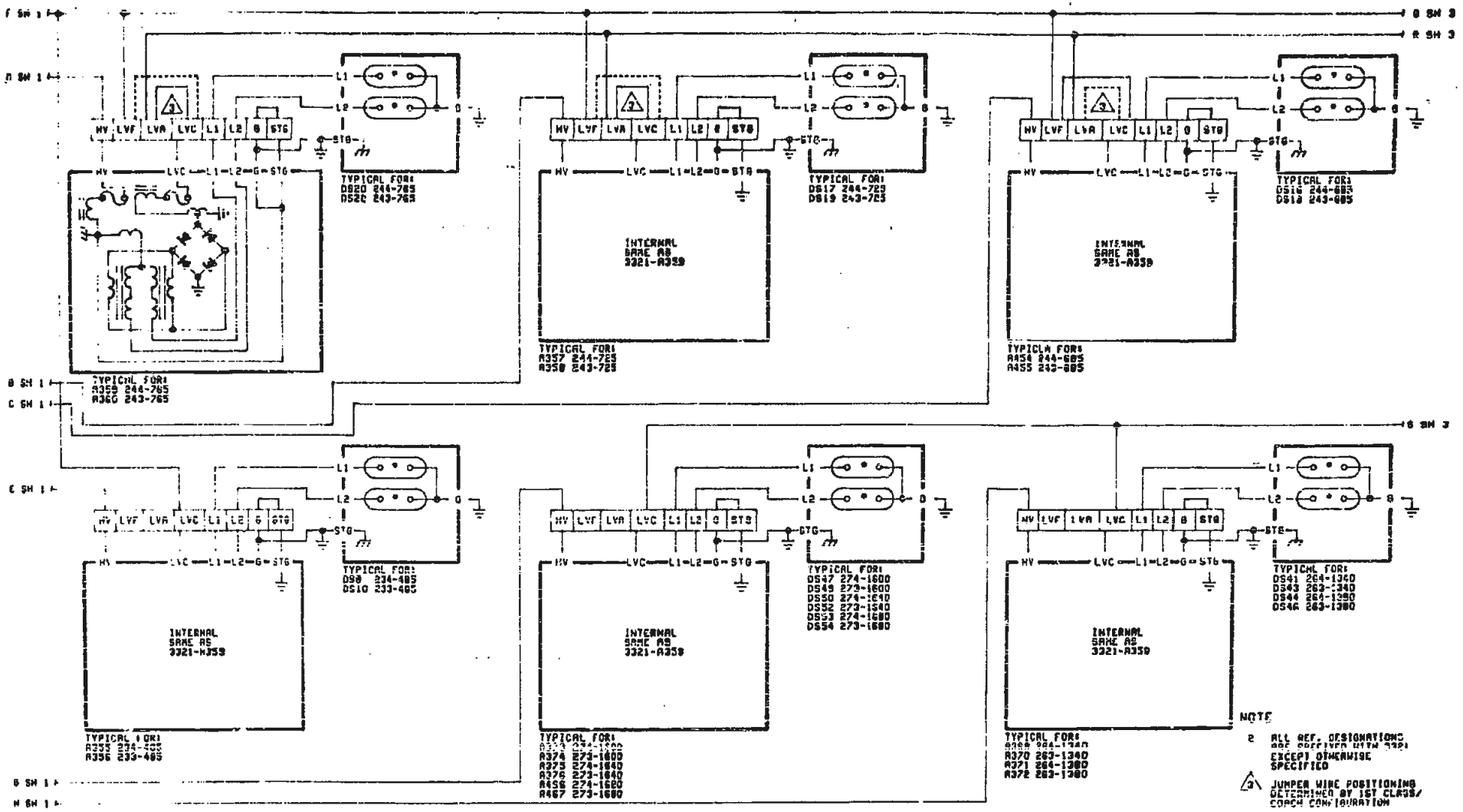
Luminaire Lights Schematic
SCHEM 3 (Sheet 4)

EFFECTIVITY: 001-031


RH GALLEY CB PANEL
FWD LUMINAIRE DISTR RLY NO. 1
AFT LUMINAIRE DISTR RLY NO. 1
AFT LUMINAIRE DISTR RLY NO. 3
FWD LUMINAIRE DISTR RLY NO. 2
AFT LUMINAIRE DISTR RLY NO. 2
LH GALLEY CB PANEL
FS 785 FWD CONT
FS 725 FWD CONT
FS 665 FWD CONT
FS 525 FWD CONT
FS 785 AFT CONT
FS 725 AFT CONT
FS 665 AFT CONT
FS 525 AFT CONT
FS 1000 FWD CONT
FS 1040 FWD CONT
FS 1080 FWD CONT
FS 1120 FWD CONT
FS 1000 AFT CONT
FS 1040 AFT CONT
FS 1080 AFT CONT
FS 1120 AFT CONT
BALLAST
TYPICAL FOR R353 234-445 R354 233-443
FWD ATTENDENT PANEL
AFT ATTENDENT PANEL
LUMINAIRE DIMMER CONT
NOTE
1 SWITCH OPEN WHEN CONTROL FULLY CCW
2 ALL REF. DESIGNATIONS ARE PREFIXED WITH 3321 EXCEPT OTHERWISE SPECIFIED
3 JUMPER WIRE POSITIONING DETERMINED BY 1ST CLASS/ COACH CONFIGURATION

R Luminaire Lights Schematic
R SCHEM 3 (Sheet 1)

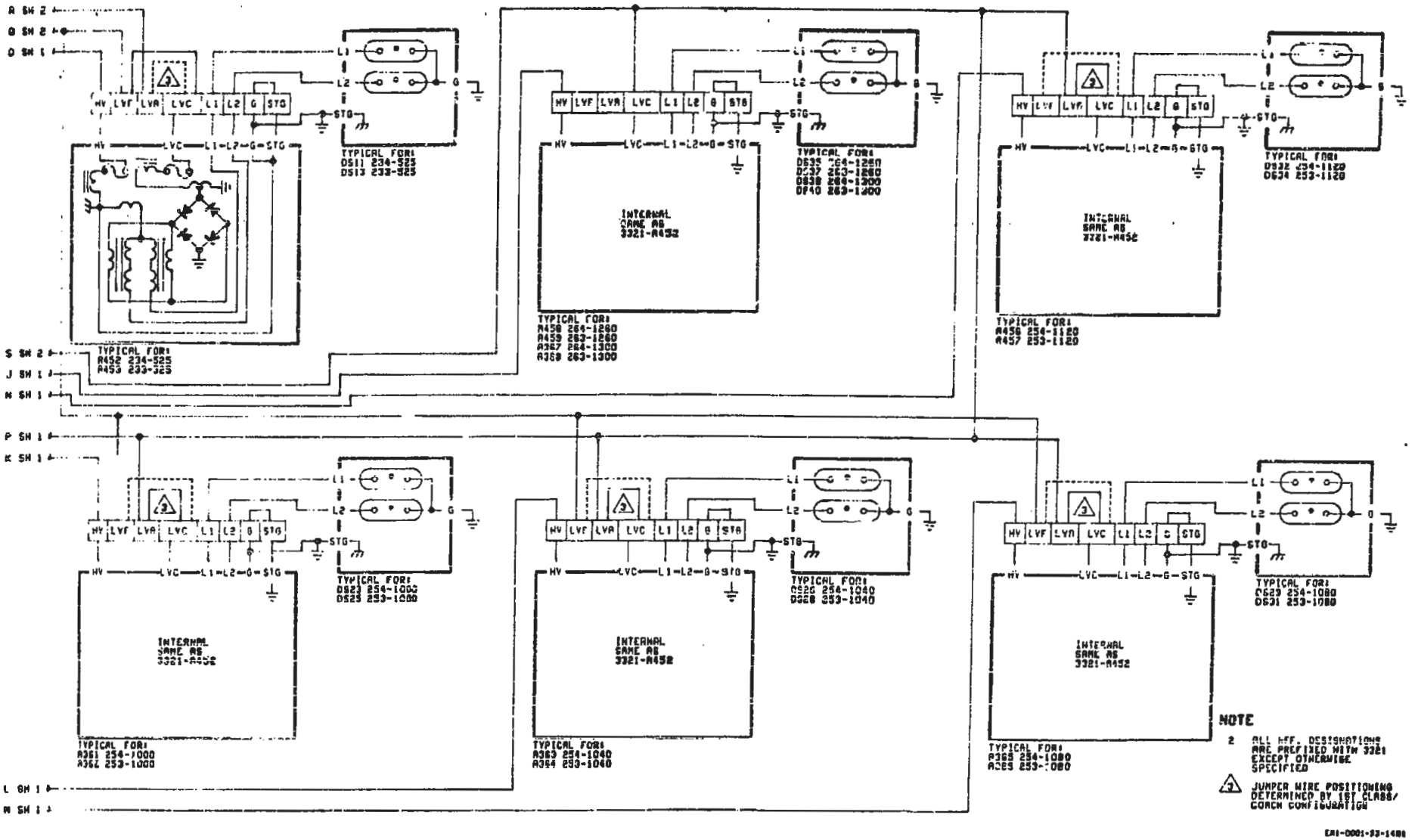
EFFECTIVITY: 032-999



R Luminaire Lights Schematic
R SCHEM 3 (Sheet 2)

EFFECTIVITY: 032-999

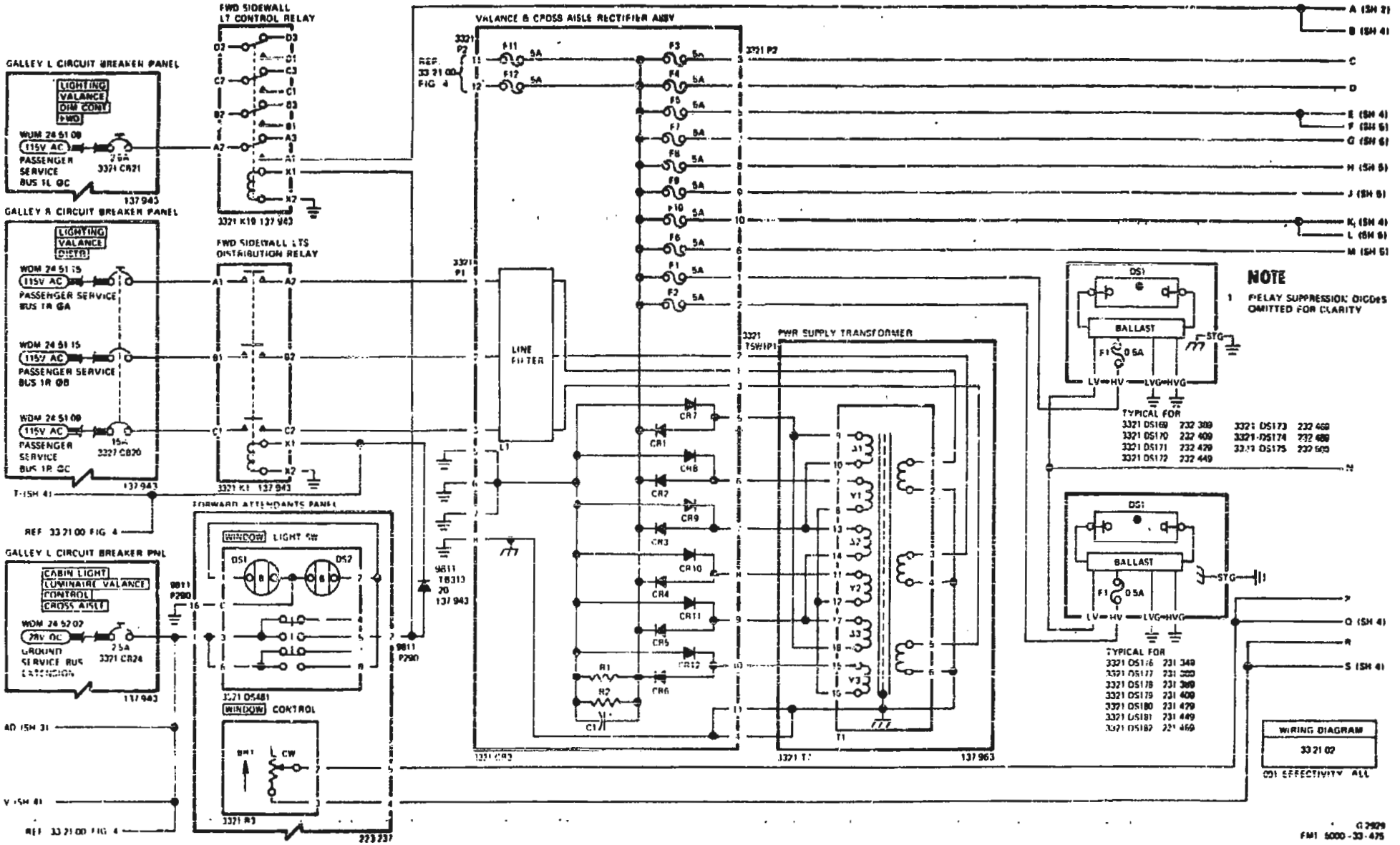
0018



R Luminaire Lights Schematic
R SCHEM 3 (Sheet 3)

EFFECTIVITY: 032-999

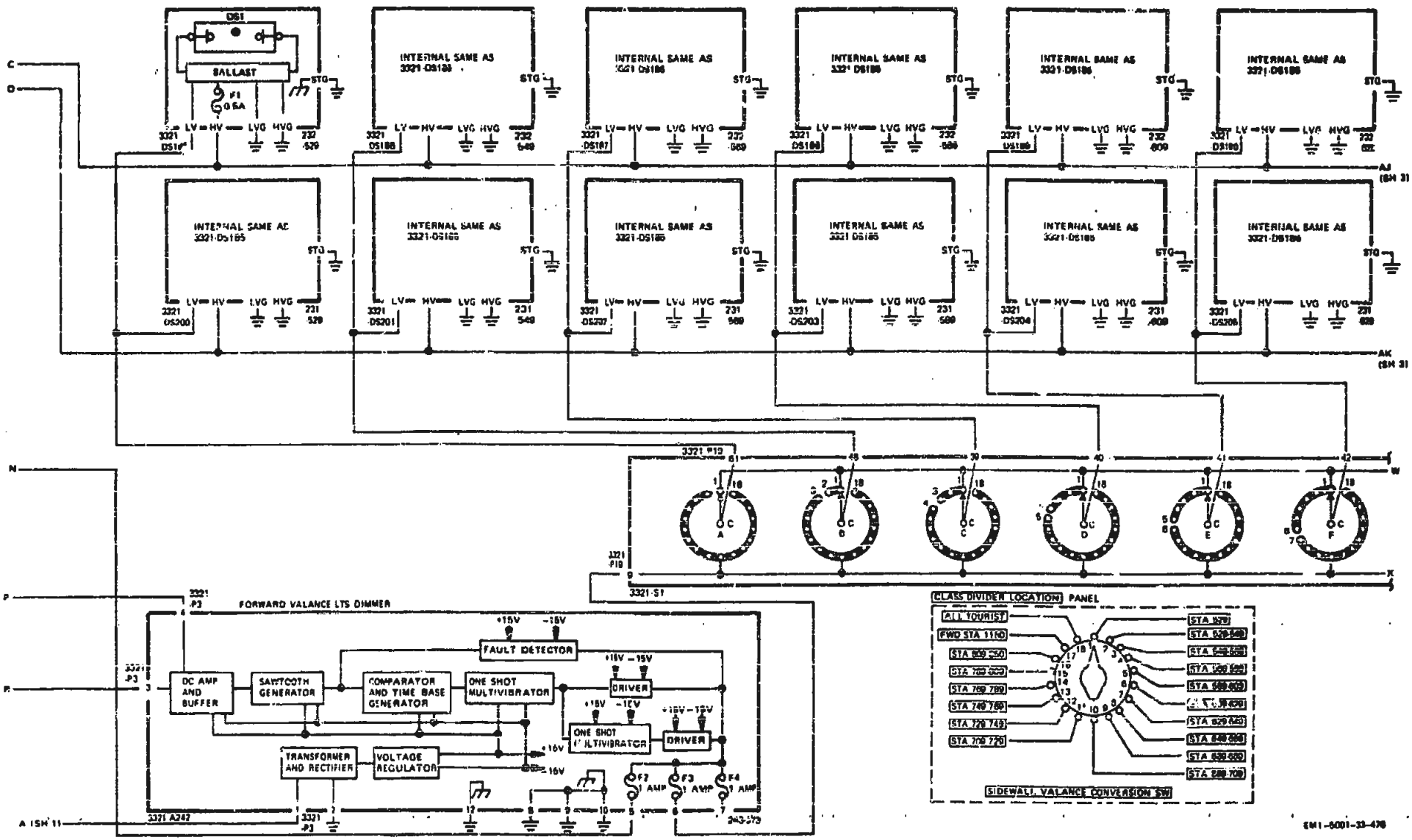
0018



R Window Valance Lights Schematic
R SCHEM 4 (Sheet 1)

EFFECTIVITY: 001-031

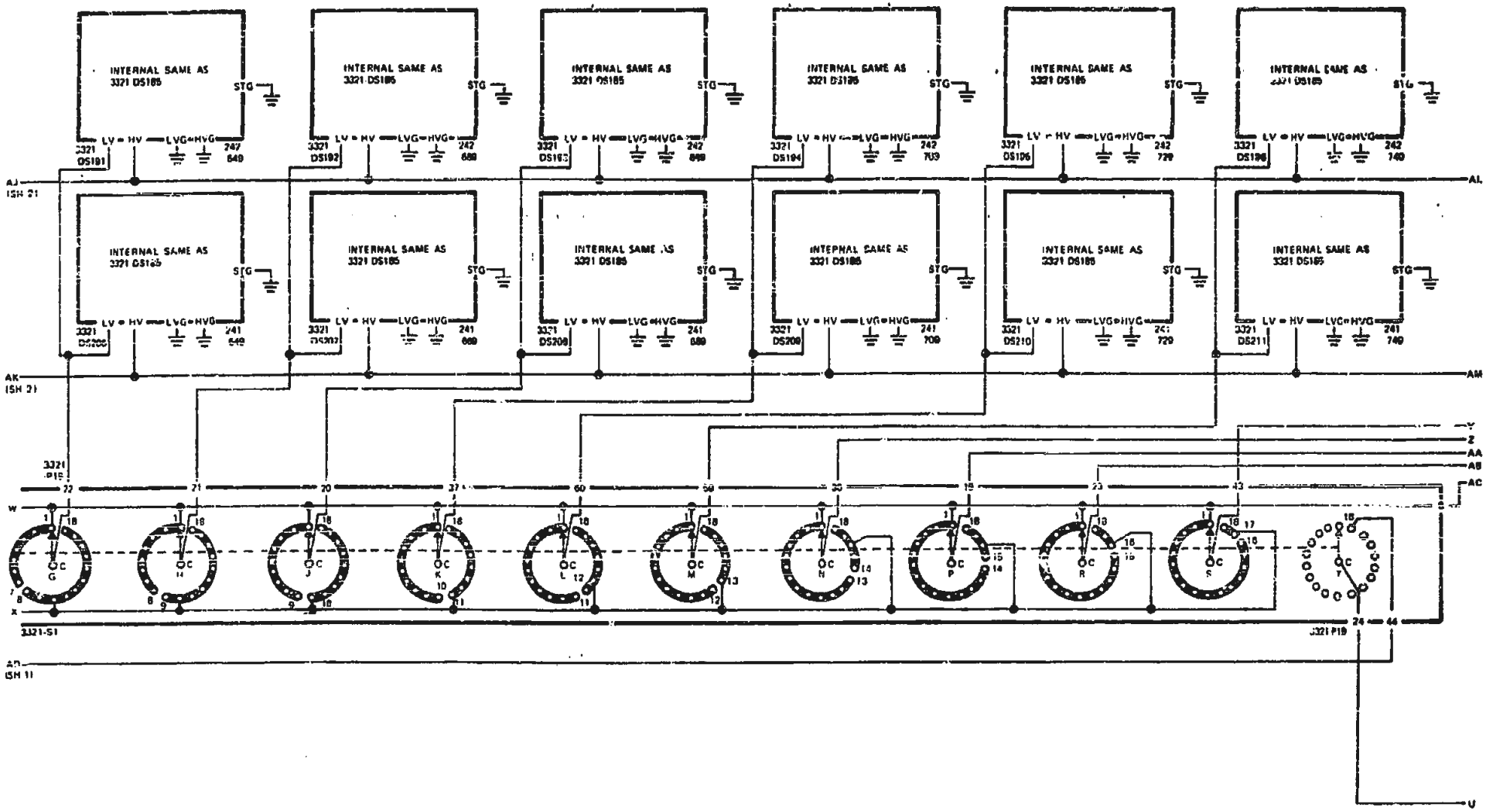
0018



R Window Valance Lights Schematic
R SCHEM 4 (Sheet 2)

EFFECTIVITY: 001-031

0018



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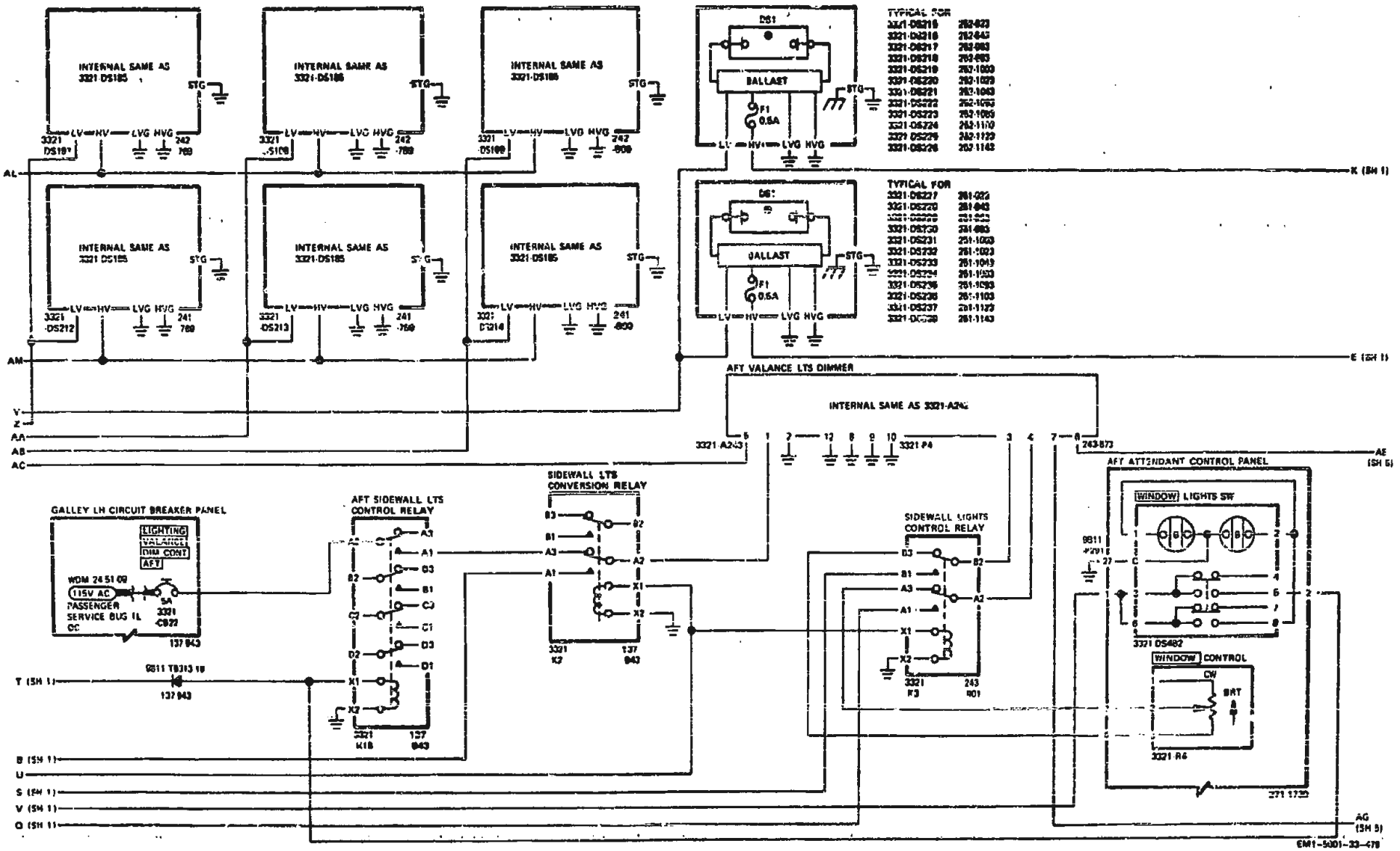
EM1-6000-33-477

R Window Valance Lights Schematic
R SCHEM 4 (Sheet 3)

EFFECTIVITY: 001-031

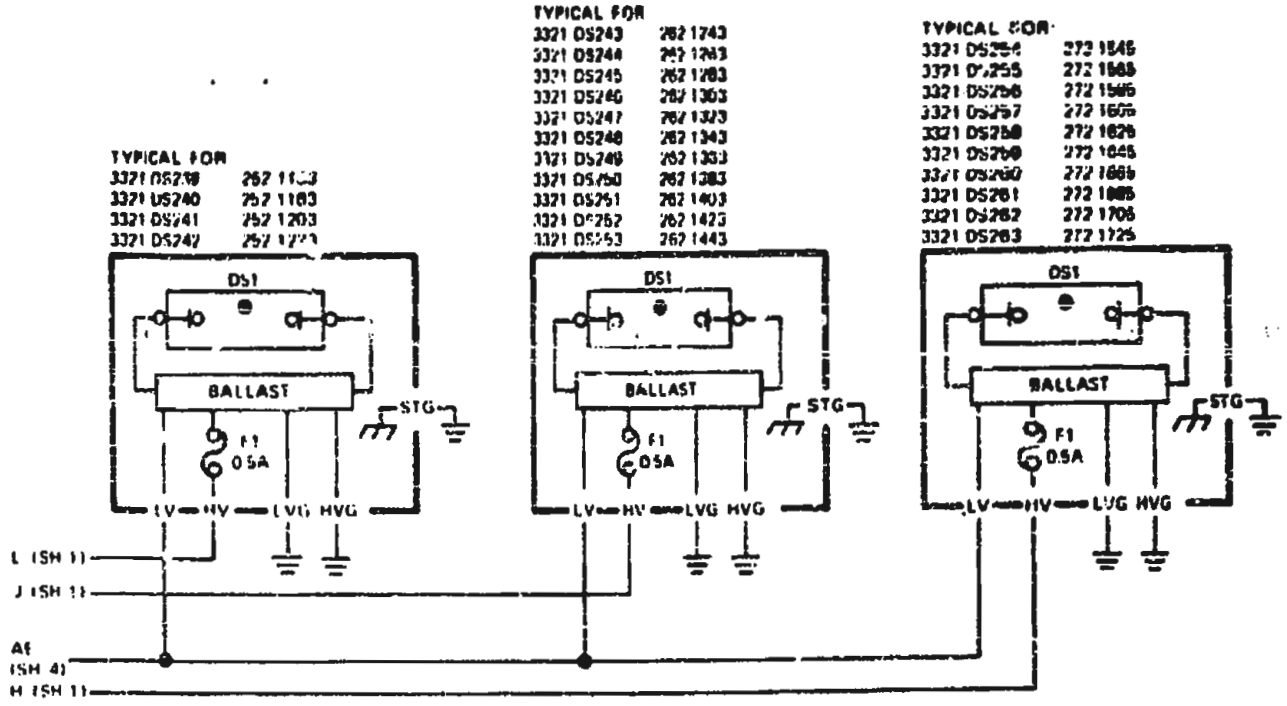
001B

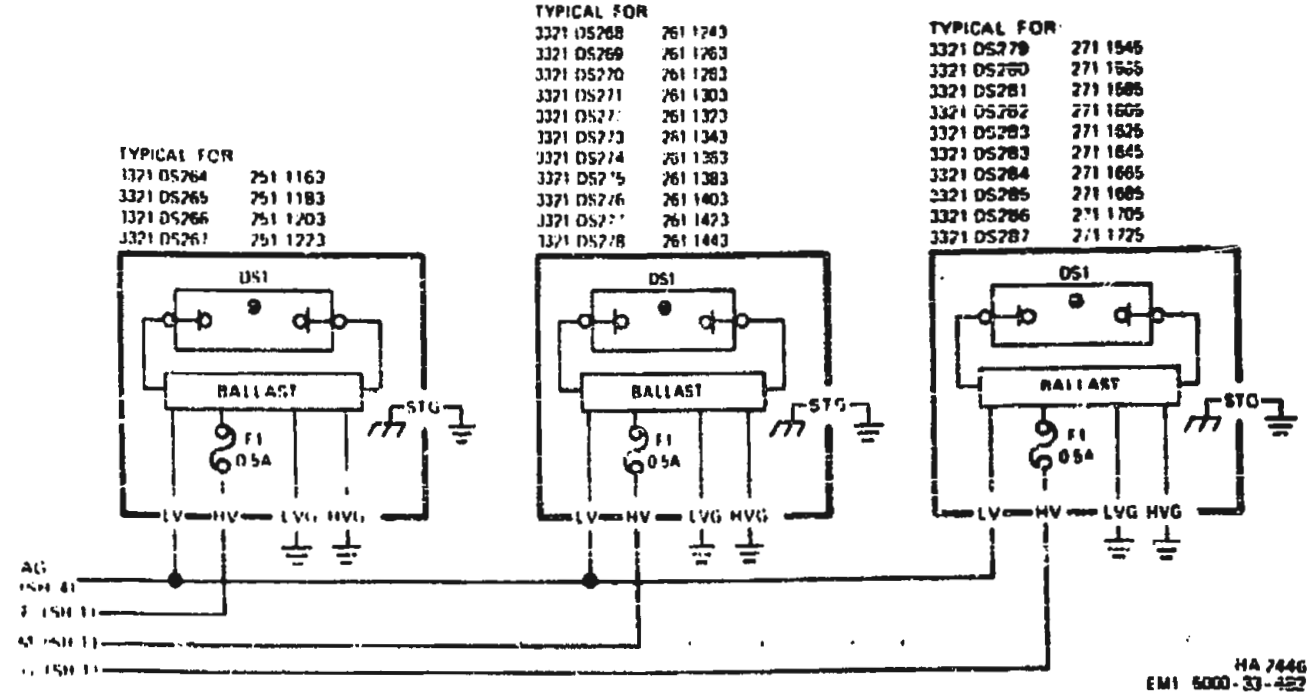


R Window Valance Lights Schematic
R SCHEM 4 (Sheet 4)

EFFECTIVITY: 001-031

0010

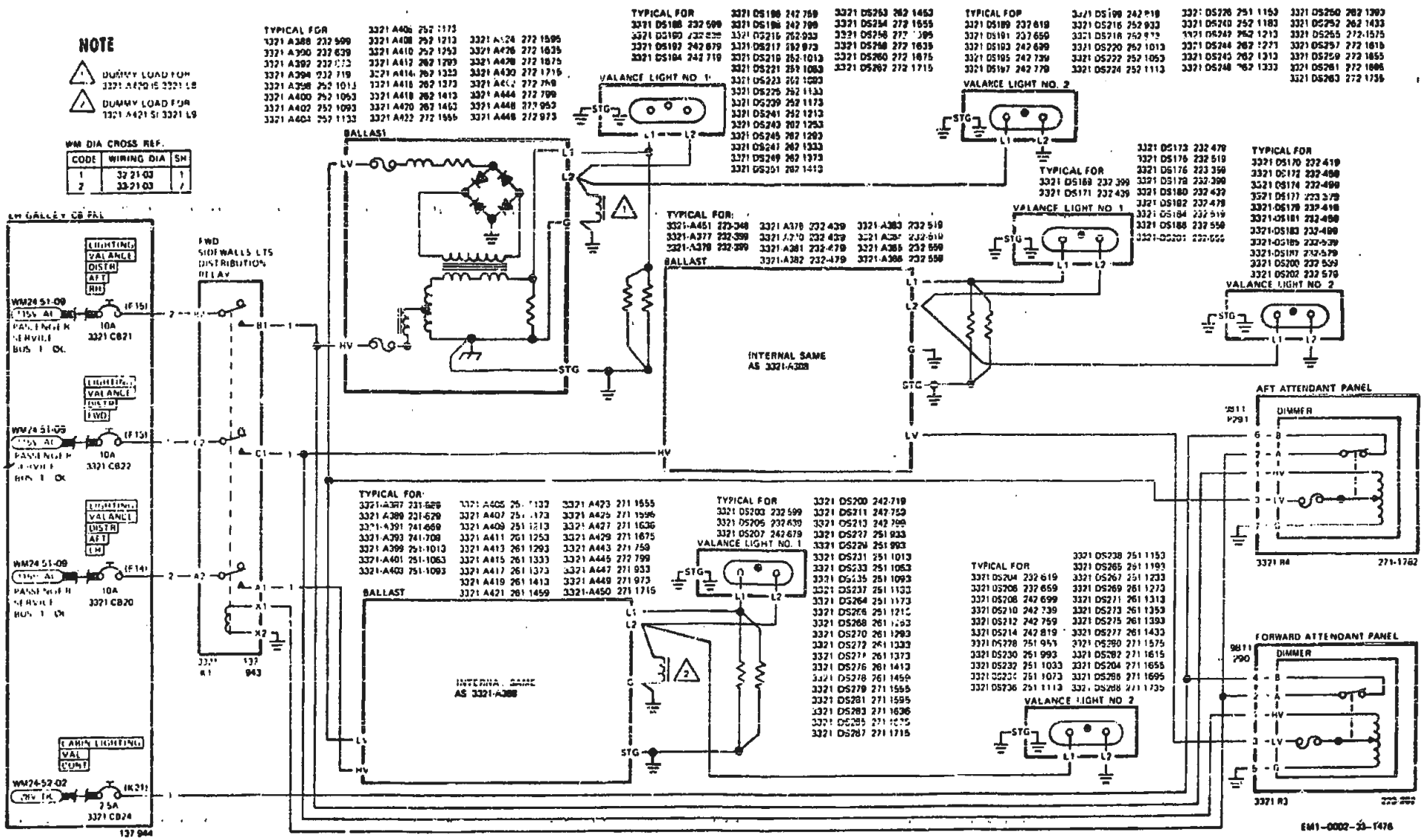




HA 7446
EMI 6000-33-422

R Window Valance Lights Schematic
R SCHEM 4 (Sheet 5)

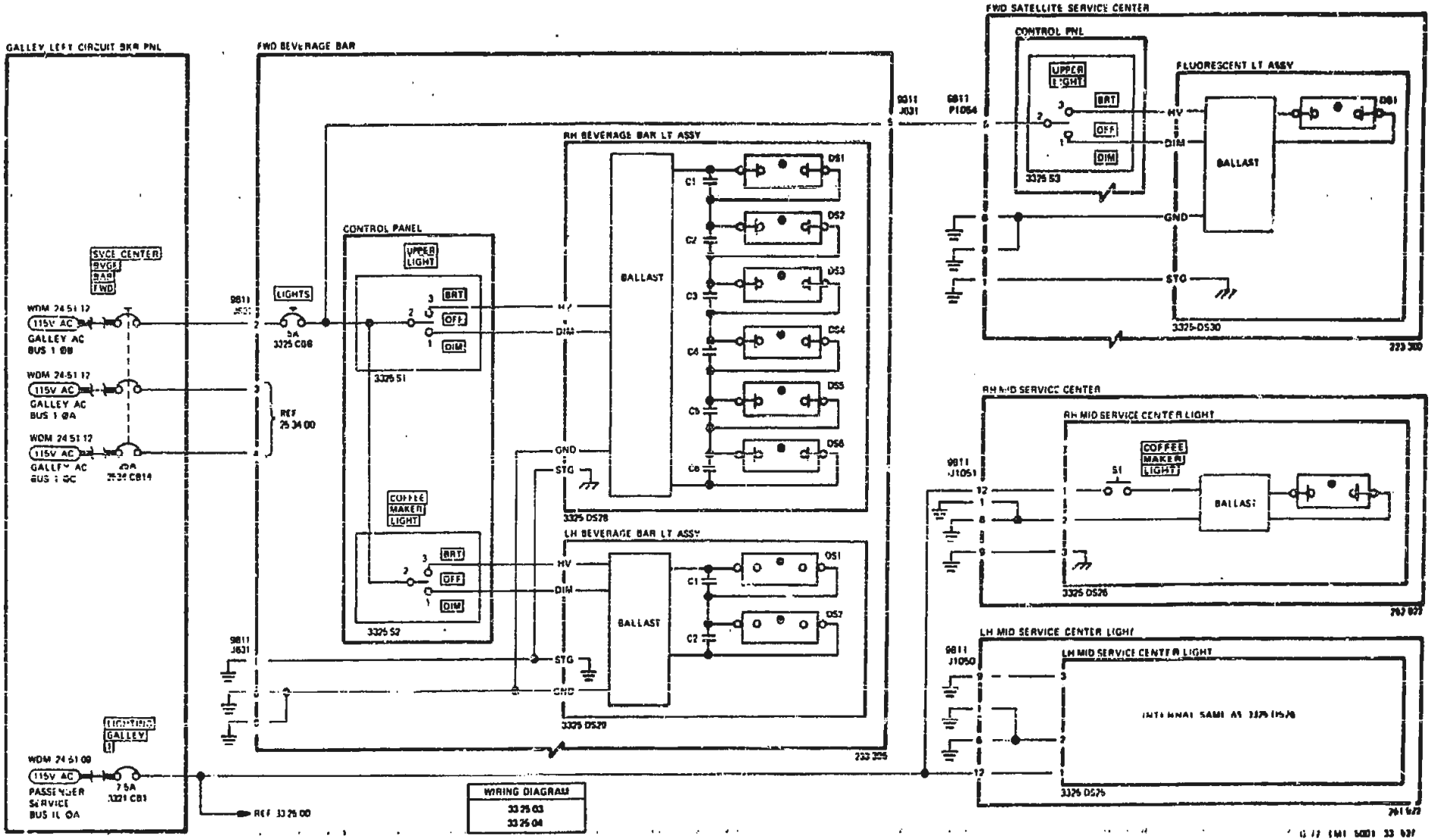
EFFECTIVITY: C01-031



R Window Valance Lights Schematic
R SCHEM 4

EFFECTIVITY: 032-999

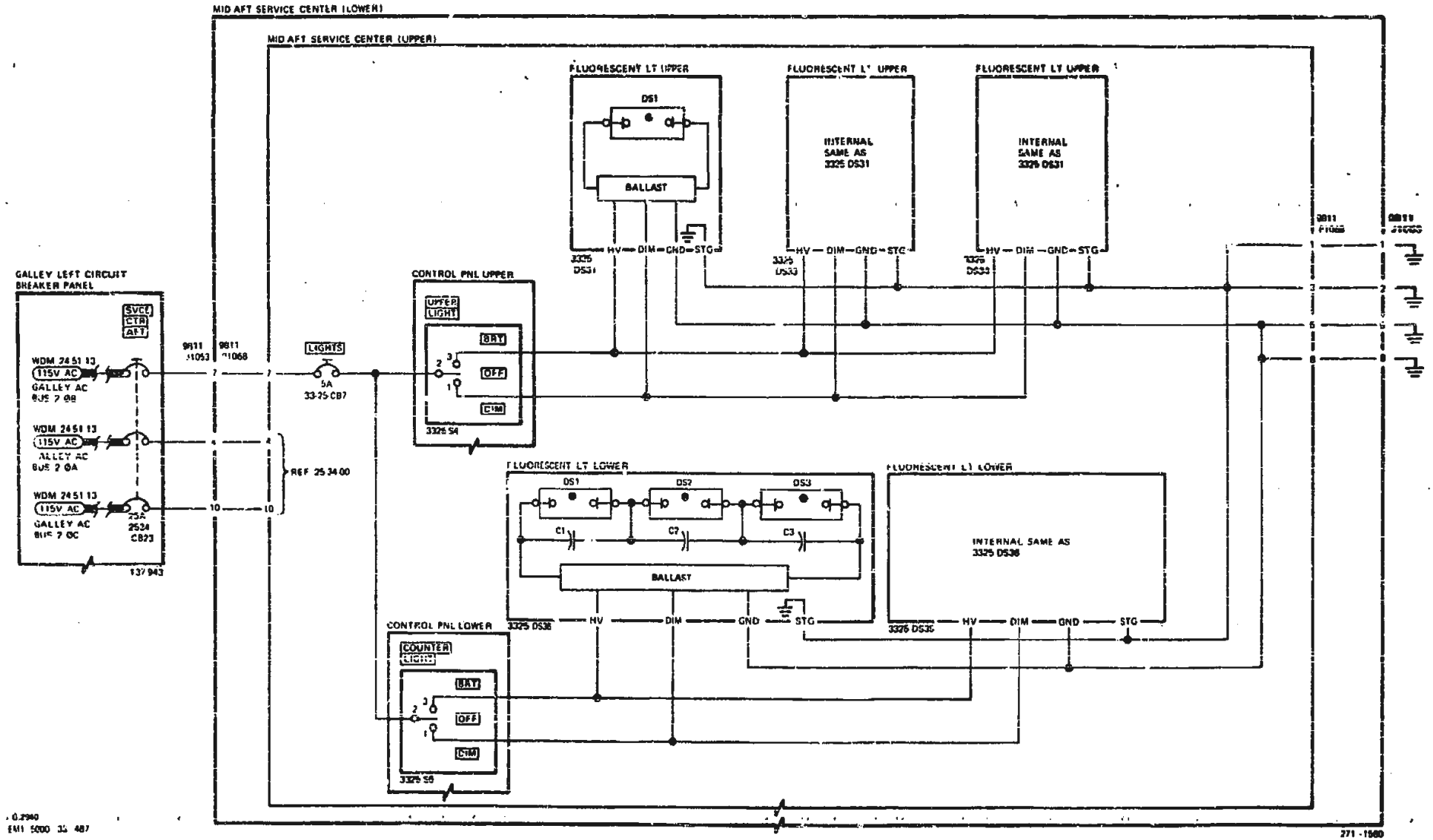
0018



R Buffet Lights Schematic
R SCHEM 5 (Sheet 1)

EFFECTIVITY: ALL

0018

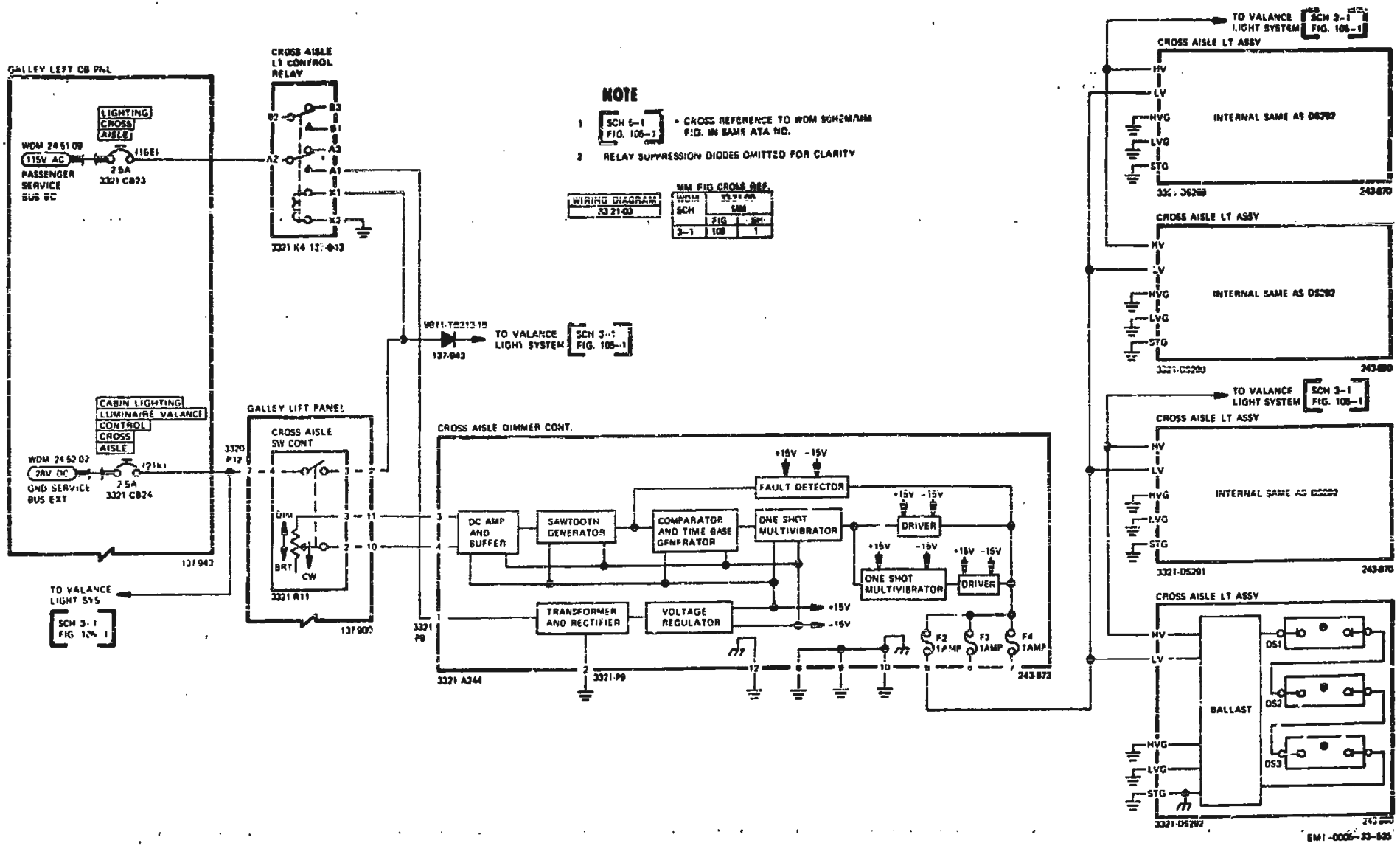


R
R

Buffet Lights Schematic
SCHEM 5 (Sheet 2)

EFFECTIVITY: ALL

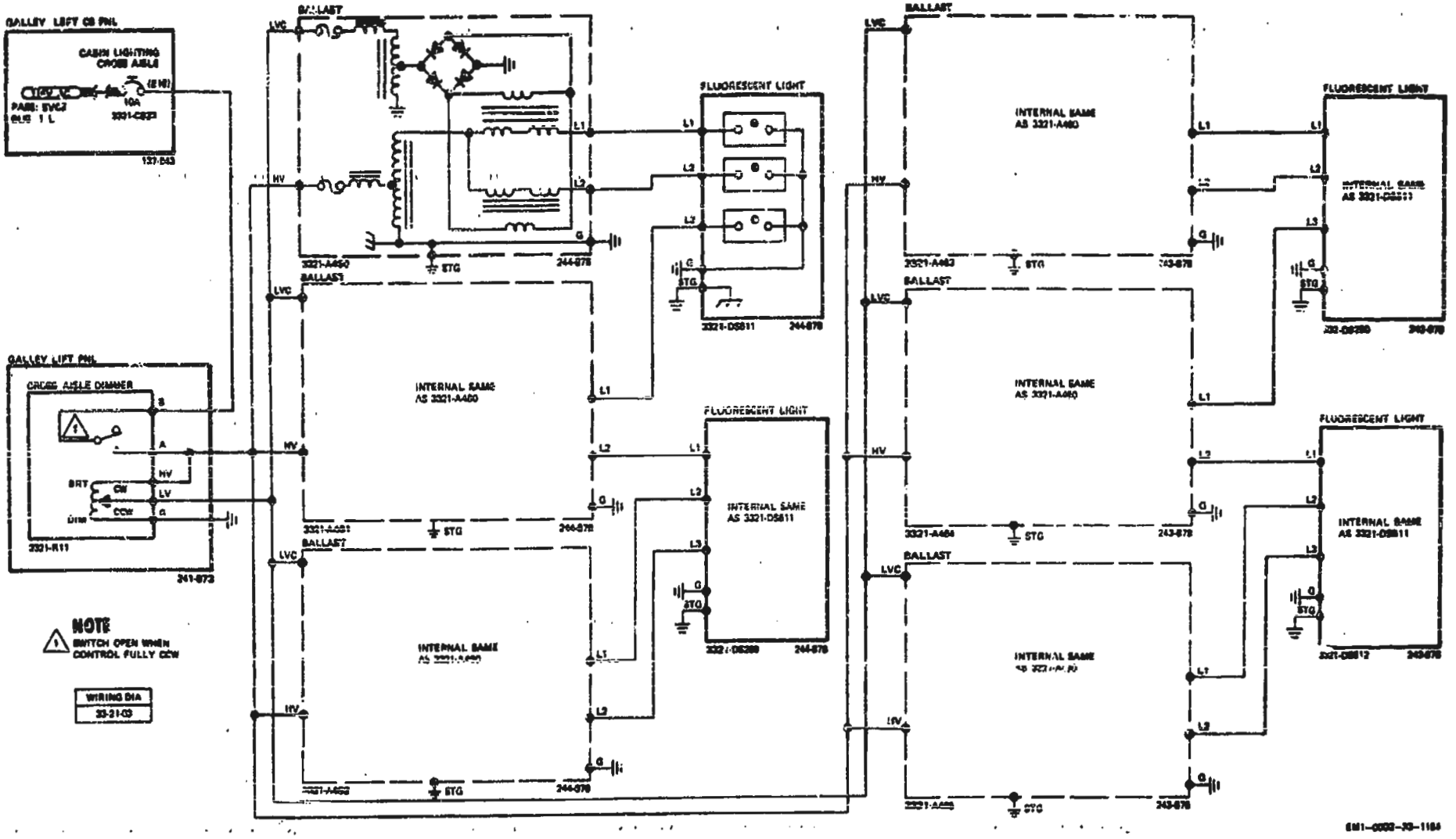
0018



R R Cross-aisle Lights Schematic
SCHEM 6

EFFECTIVITY: 001-031

001B



R Cross-aisle Lights Schematic
R SCHEM 6

EFFECTIVITY: 032-999

001B

AISLE, CEILING, AND BUFFET LIGHTING - ADJUSTMENT AND TEST

1. General

Operational tests are provided for cabin lighting (Para. 3A) and cabin conversion (Para. 3B).

2. Referenced Procedure

R 24-00-00 Electrical Power - Maintenance Practices

3. Adjustment/Test

A. Operational Test - Cabin Lighting

R (1) Turn on electrical power (Ref. 24-00-00).

(2) On pilots overhead circuit breaker panel CB1, zone 210, verify that circuit breaker AISLE LIGHTS (L5) on the STBY bus is closed.

On Flight Engineer/Second Officers overhead circuit breaker panel CB2, zone 215, verify that circuit
C breakers AISLE LT - FWD and AFT (A10, A11) and FWD
C CLOSET and LAV LT (K7) are closed.

On galley left circuit breaker panel, zone 130, verify that the following circuit breakers are closed:

DC GRD SVCE BUS EXT

CAB LTG - SOFFIT CONT NO. 1 (2)

CABIN LIGHTING - LUMINAIRE VALANCE CONTROL (3)

C LAV CONT

PASS SERV BUS IL

LIGHTING - CROSS AISLE, and GALY 1 and GALY 2

LIGHTING - VALANCE (3)

CAB LTG SOFFIT - MID FWD 3

C LIGHTING LAV AFT

GALLEY AC BUS 2

SVCE CENTER BVGE BAR FWD

SVC CTR AFT

On galley right circuit breaker panel, zone 130, verify that the following circuit breakers are closed:

CABIN LIGHTING SOFFIT - FWD (2) and MID FWD (2)

CABIN LIGHTING SOFFIT - CENTER, (2) MID, and AFT

PASS SERV BUS 1 R

CAB LTG - LUMINAIRE DIM CONT (2)

CABIN LIGHTING - LUMINAIRE DISTRIBUTION (2)

At the forward beverage bar and the aft service center, verify that the LIGHTS circuit breaker is closed.

(3) On the forward attendants panel, depress AISLE switchlight to the on position; verify that the switchlight and the eight aisle lights in the forward section of the cabin come on.

On the aft attendants panel, depress AISLE switchlight to the on position; verify that the switchlight and the 12 rear aisle lights come on.

(4) On the Flight Engineer/Second Officers overhead circuit breaker panel CB2, zone 215, open the AISLE LT - FWD and AFT circuit breakers and verify that the aisle lights at the following locations remain on: FS 599 (left), FS 814 (right), FS 963 (left), FS 1233 (right) FS 1442 (left), and FS 1546 (right). All other aisle lights will be off.

(5) Close the AISLE LT - FWD and AFT circuit breakers and verify that all 20 aisle lights are on.

(6) Depress the AISLE switchlights to off and verify that both switchlights and all aisle lights go out.

(7) On the CLASS DIVIDER LOCATION panel, set conversion switches as follows:

SIDEWALL VALANCE - FS 649-669

OVHD LUMINAIRES - FS 510-510

C C C C (8) On the forward attendants panel, depress the cabin lights - ceiling and window and the master lav switchlights to the on position. Verify that the switchlights and the following lights are on:

VALANCE - FS 649 and forward

SOFFIT - FS 645 and forward

LUMINAIRES - First three rows

Verify that all other valance, soffit, and luminaire lights are out.

(9) At the forward attendants panel, slowly rotate the CEILING and WINDOW dimming controls through their entire range from DIM to BRT, and back to DIM. At the DIM position, the lights must be off. Verify that the valance, soffit, and luminaire light intensity varies smoothly (no sudden change). Set both dimming controls to the BRT position.

NOTE: Cold cathode fluorescent lights may illuminate dimly and flicker following exposure to temperatures below 50°F. Allow cold cathode fluorescent lights to warm up following a cold soak at temperatures below 50°F before C C C evaluating performance. The two soffit lights above forward lavatory aisle will remain on BRIGHT.

C C C C C (10) On the aft attendants panel, depress the cabin lights ceiling, window and master lav switchlights to the ON position. Verify that switchlights are on and that all valance, soffit, and luminaire lights that had been OFF are now ON.

(11) At the aft attendants panel, slowly rotate the CEILING and WINDOW dimming controls through their entire range from DIM to BRT, and back to DIM. At the DIM position, the lights must be off. Verify that the valance, soffit, and luminaire light intensity varies smoothly (no sudden changes).

NOTE: Cold cathode fluoreescent lights may illuminate dimly and flicker following exposure to temperatures below 50°F. Allow cold cathode fluorescent lights to warm up following a cold soak at temperatures below 50°F before

C evaluating performance. The four soffit lights
C above the aft lavatory aisle will remain ON.

B. Operational Test - Cabin Conversion

CAUTION: BEFORE ROTATING CONVERSION SWITCHES, PLACE CEILING AND WINDOW SWITCHLIGHTS ON FORWARD AND AFT ATTENDANT PANELS IN OFF (OUT) POSITION.

(1) Verify that power is on and circuit breakers are closed [Ref. Steps 2A(1) and 2A(2)].

(2) On the CLASS DIVIDER LOCATION panel, set conversion switches as follows:

SIDEWALL VALANCE - FS 529

OVHD LUMINAIRES - FS 471

SOFFIT LTS - FS 388

(3) On the forward attendants panel, depress the CABIN LIGHTS - CEILING and WINDOW switchlights to the on position. Verify that the switchlights and the following lights are on:

VALANCE - FS 509 and forward

SOFFIT - FS 350 and forward

LUMINAIRES - First two rows

Verify that all other valance soffit and luminaire lights are out.

(4) At the forward attendants panel, slowly rotate the CEILING and WINDOW dimming controls through their entire range from DIM to BRT and back to DIM. At the DIM position, the lights must be off. Verify that the valance, soffit, and luminaire light intensity varies smoothly (no sudden change). Set both dimming controls to the BRT position.

NOTE: Cold cathode fluorescent lights may illuminate dimly and flicker following exposure to temperatures below 50°F. Allow cold cathode fluorescent lights to warm up following a cold soak at temperatures below 50°F before
C evaluating performance. The two soffit lights
C above the forward lavatory aisle will remain on
C BRIGHT.

(5) On the aft attendants panel, depress the CABIN LIGHTS - CEILING and WINDOW switchlights to the on position. Verify that the switchlights are on and that all valance, soffit, and luminaire lights that had been off, are now on.

(6) At the aft attendants panel, slowly rotate the CEILING and WINDOW dimming controls through their entire range from DIM to BRT, and back to DIM. At the DIM position, the lights must be off. Verify that the valance, soffit, and luminaire light intensity varies smoothly (no sudden changes). Adjust both dimming controls so that the lights are dim.

NOTE: Cold cathode fluorescent lights may illuminate dimly and flicker following exposure to temperatures below 50°F. Allow cold cathode fluorescent lights to warm up following a cold soak at temperatures below 50°F before
CR evaluating performance. The four soffit lights
CR above the aft lavatory aisle will remain ON.

(7) At the CLASS DIVIDER LOCATION panel, rotate in turn, each of the three conversion switches clockwise.

CAUTION: CEILING SWITCHES MUST BE OFF BEFORE RESETTING THE CONVERSION SWITCH.

Verify that each position of the conversion switches causes its associated lights to change in intensity from forward to rear (all lights forward of the selected position are bright and all lights aft of the selected position are dim).

(8) Rotate the three conversion switches to the ALL TOURIST position and verify that all valance, soffit, and luminaire lights are bright.

(9) At the forward attendants panels, rotate the dimming controls and verify that all cabin valance, soffit, and luminaire lights are controlled at the forward attendants panel.

CR NOTE: The two soffit lights above the forward lavatory
CR aisle and the four soffit lights above the aft
CR lavatory aisle are not dimmable.

(10) At the CLASS DIVIDER LOCATION PANEL, set the conversion switches to the appropriate positions required for the first class/coach loading configuration.

(11) At the forward and aft attendants panels, depress the CEILING and WINDOW switchlights to the off position. Verify that the switchlights and cabin lights go out.

(12) At the upper lift control panel, rotate the cross-aisle control from DIM to BRT several times and verify that the intensity of all four cross-aisle lights varies smoothly. Set the control to DIM and verify that all four cross-aisle lights go out.

(13) At each of the mid cabin service bars, verify that each light goes on and off according to its switch setting.

(14) At the forward beverage bar, operate both rocker switches from OFF to DIM, to BRT, and back to OFF. Verify that each of the fluorescent lights illuminates dimly, then brightly, and goes off.

(15) At the forward and aft service centers, verify that the lights operate in a dim or a bright mode according to the switch position.

C (16) At the forward attendants panel, verify that the two
C soffit lights above the forward lavatory aisle are
C turned OFF with the master lav switchlight.

C (17) At the aft attendants panel, verify that the four
C soffit lights above the aft lavatory aisle are turned
C OFF with the master lav switchlight.

CR (18) Turn off electrical power (Ref. 24-00-00).

AISLE, CEILING, BUFFET AND VALANCE LIGHTING - ADJUSTMENT AND TEST

1. General

Operational tests are provided for cabin lighting which consists of the aisle lights (Para. 3A), the cross aisle lights (Para. 3B), the luminaire ceiling lights (Para. 3C), the soffit ceiling lights (Para. 3D), the buffet lights (Para. 3E), and the window valance lights (Para. 3F).

2. Referenced Procedure

24-41-00 External Power/Ground Service System - Maintenance Practices

3. Adjustment/Test

A. Operational Test - Aisle Lighting

(1) Turn on electrical power (Ref. 24-00-00).

(2) On pilots overhead circuit breaker panel CB1, zone 210, verify that the following circuit breaker is closed:

AISLE LIGHTS (L5)

On Flight Engineer/Second Officers overhead circuit breaker panel CB2, zone 215, verify that the following circuit breakers are closed:

AISLE LIGHTS FWD (A10)

AISLE LIGHTS AFT (A11)

(3) On forward attendants panel, depress AISLE LIGHTS switch to the on position and verify that the switchlight and all aisle lights in the cabin come on.

(4) On Flight Engineer/Second Officers overhead circuit breaker panel CB2, zone 215, open the AISLE LIGHTS FWD (A10) and the AISLE LIGHTS AFT (A11) circuit breakers. Verify that the aisle lights at FS 561 (LH), FS 1409 (LH), FS 813 (RH), FS 1220 (RH), and FS 1559 (RH) remain on. All other aisle lights will go out.

(5) Close circuit breakers AISLE LIGHTS FWD and AISLE LIGHTS AFT, and verify that all the aisle lights are on.

(6) Depress the AISLE LIGHTS switch on the forward attendants panel to off and verify that switchlight and all aisle lights go out.

(7) Turn off electrical power (Ref. 24-00-00).

B. Operational Test - Cross Aisle Lighting

(1) Turn on electrical power (Ref. 24-00-00).

(2) On galley left circuit breaker panel, zone 137, verify that the following circuit breaker is closed:

LIGHTING - CROSS AISLE (E16)

(3) At the upper galley lift panel, zone 240, turn the CROSS-AISLE LIGHTS CONTROL knob to the full CCW position, and verify that all fluorescent lights over the No. 2 cross-aisle are out.

(4) Slowly rotate the CROSS-AISLE LIGHTS CONTROL CW from the off position and verify that all cross aisle lights come on at a dim glow.

(5) Continue rotating the dimmer control CW, and verify that the cross aisle lights increase in intensity smoothly from dim to bright.

(6) Rotate the dimmer control CCW to the off position and verify that all aisle lights go out.

(7) Turn off electrical power (Ref. 24-00-00).

C. Operational Test - Luminaire Ceiling Lighting

(1) Turn on electrical power.

(2) On galley right circuit breaker panel, zone 137, verify that the following circuit breakers are closed:

CABIN LIGHTING - LUMINAIRE DISTRIBUTION

FWD 1 (E11)

FWD 2 (E12)

AFT 1 (F11)

AFT 2 (F12)

AFT 3 (F13)

AFT 4 (F16)

At the galley left circuit breaker panel, zone 137, verify that the following circuit breakers are closed:

CABIN LIGHTING - LUMINAIRE CONTROL FWD (K19)

CABIN LIGHTING - LUMINAIRE CONTROL AFT (K20)

(3) On forward and aft attendants panels, verify that both CABIN LIGHTS CEILING CONTROL knobs are in the full CCW positions.

(4) Verify that all luminaire lights in the cabin are out.

(5) At the forward attendants panel, slowly rotate CABIN LIGHTS CEILING CONTROL CW approximately 10 degrees from the OFF position. Verify that all the luminaire lights forward of the class divider come on at a very dim glow.

(6) Rotate the control knob to off and verify that all those lights go out.

(7) Rotate the forward CABIN LIGHTS CEILING CONTROL knob gradually to the BRT position and verify that all luminaire lights forward of the class divider increase in intensity smoothly from dim to bright.

NOTE: Cold cathode fluorescent lights may light dimly and flicker following exposure to temperatures below 50°F. Before evaluating performance, allow lights to warm up for 15 minutes.

(8) Rotate forward CABIN LIGHTS CEILING control fully CCW to the off position and verify that all luminaire lights forward of class divider decrease in intensity smoothly and then go out.

(9) On aft attendants panel, slowly rotate CABIN LIGHTS CEILING CONTROL knob CW approximately 10 degrees from the OFF position. Verify that all the luminaire lights aft of the class divider come on at a very dim glow.

(10) Rotate the control knob to off and verify that all those lights go out.

(11) Rotate the aft CABIN LIGHTS CEILING CONTROL knob gradually to the BRT position, and verify that all luminaire lights aft of class divider increase in intensity smoothly from dim to bright.

NOTE: Cold cathode fluorescent lights may light dimly and flicker following exposure to temperature below 50°F. Before evaluating performance, allow lights to warm up for 15 minutes.

(12) Rotate aft CABIN LIGHTS CEILING CONTROL knob fully CCW to the off position and verify that all luminaire lights aft of class divider decrease in intensity and then go out.

(13) Turn off electrical power (Ref. 24-00-00).

D. Operational Test - Soffit Ceiling Lighting

(1) Turn on electrical power (Ref. 24-00-00).

(2) On galley left circuit breaker panel, zone 137, verify that the following circuit breakers are closed:

CABIN LIGHTING - SOFFIT FWD (G13)

CABIN LIGHTING - SOFFIT CLASS DIVIDER A (G14)

CABIN LIGHTING - SOFFIT CLASS DIVIDER B (G15)

CABIN LIGHTING - SOFFIT AFT RH (G16)

CABIN LIGHTING - SOFFIT AFT CTR (G17)

CABIN LIGHTING - SOFFIT AFT LG (G18)

CABIN LIGHTING - SOFFIT CONTROL FWD (J20)

CABIN LIGHTING - SOFFIT CONTROL AFT (J21)

LIGHTING LAV AFT (F17)

LIGHTING LAV CONT (G22)

On Flight Engineer/Second Officers overhead circuit breaker panel CB2, zone 215, verify that the following circuit breakers are closed:

(3) At the Forward and Aft Attendants Panels, verify that both the forward SOFFIT LIGHT CONTROL and aft SOFFIT LIGHT CONTROL knobs are in the full CCW positions.

(4) Verify that all the soffit lights in the cabin are out.

(5) At the forward attendants panel, rotate the forward SOFFIT LIGHT CONTROL knob CW from OFF, through DIM, to BRT. Verify that all the soffit lights forward of the

class divider come on and change the intensity from dim to bright.

(6) Rotate the dimming control knob CCW from BRT, through DIM, to OFF, and verify that all the soffit lights forward of class divider change in intensity from bright to dim and then go out.

(7) At aft attendant panel, rotate the aft SOFFIT LIGHT CONTROL knob CW from OFF, through DIM, to BRT position. Verify that all soffit light aft of the class divider (except eight lights over No. 3 and No. 4 cross aisle areas) change in intensity from dim to bright.

(8) Rotate the dimming control knob CCW from BRT, through DIM, to OFF, and verify that all the soffit lights aft of class divider change in intensity from bright to dim and then go out.

(9) At the aft attendants panel, rotate the AFT AISLE dimming control knob CW from OFF, through DIM, to BRT. Verify that the four soffit lights over No. 3 cross aisle (FS 1520) and four soffit lights over No. 4 cross aisle (FS 1800) change in intensity from dim to bright.

(10) Rotate the AFT AISLE dimming control knob CCW from BRT, through DIM, to OFF position. Verify that all the four lights above No. 3 cross aisle and the four lights above No. 4 cross aisle change in intensity from bright to dim and then go out.

(11) Turn off electrical power (Ref. 24-00-00).

E. Operational Test - Buffet Lighting

(1) Turn on electrical power (Ref. 24-00-00).

(2) On galley left circuit breaker panel, zone 137, verify that the following circuit breaker is closed:

SVCE CENTER BVGE BAR FWD (H15)

LIGHTING GALLEY 1 (E18)

SVCE CTR AFT (K8)

(3) At each of the mid cabin service bars, verify that each light goes on and off according to its switch setting.

(4) At the forward beverage bar, operate both rocker switches from OFF to DIM, to BRT, and back to OFF.

Verify that each of the fluorescent lights comes on dimly, then brightly, and goes off.

(5) At the forward and aft service centers, verify that the lights operate in a dim or a bright mode according to the switch position.

(6) Turn off electrical power (Ref. 24-00-00).

F. Operational Test - Window Valance Lighting

(1) Turn on electrical power (Ref. 24-00-00).

(2) On galley left circuit breaker panel, zone 137, verify that the following circuit breakers are closed:

LIGHTING - VALANCE DISTR FWD (F13)

LIGHTING - VALANCE DISTR AFT LH (F14)

LIGHTING - VALANCE AFT RH (F15)

CABIN LIGHTING - VALANCE CONTROL (K21)

(3) At the forward attendants panel, zone 220, verify that the forward VALANCE LIGHTS CONTROL knob is in the fully CCW position.

(4) At the aft attendants panel, zone 270, verify that the aft VALANCE LIGHTS CONTROL knob is in the fully CCW position.

CAUTION: HIGH VOLTAGE POWER REMAINS ON VALANCE LIGHTS UNLESS BOTH FWD AND AFT CONTROLS ARE IN THE FULLY CCW POSITIONS.

(5) Verify that all the window valance lights in the cabin are out.

(6) Slowly rotate forward VALANCE LIGHTS CONTROL knob CW approximately 10 degrees, and verify that all the valance lights come on at a very dim glow.

NOTE: Valance lights in aft cabin may be controlled from forward attendants panel.

(7) Rotate forward VALANCE LIGHTS CONTROL knob CCW to OFF position and verify that all the valance lights go out.

(8) Rotate forward VALANCE LIGHTS CONTROL knob CW from OFF, through DIM, to BRT, and verify that only the valance lights forward of the class divider come on with equal

intensity for each control switch setting, while valance lights located just aft of the class divider are lighted with a very dim glow.

(9) Rotate forward VALANCE LIGHTS CONTROL switch from BRT, through DIM, to OFF position, and verify that all the valance lights decrease smoothly in intensity and go out.

(10) Slowly rotate aft VALANCE LIGHTS CONTROL knob CW approximately 10 degrees, and verify that all the valance lights come on at a very dim glow.

NOTE: Valance lights in forward cabin may be controlled from aft attendants panel.

(11) Continue rotating aft VALANCE LIGHTS CONTROL knob CCW to OFF position, and verify that all the valance lights go out.

(12) Rotate aft VALANCE LIGHTS CONTROL knob CW from OFF, through DIM, to BRT, and verify that only the valance lights aft of the class divider come on with equal intensity for each control switch setting, while valance lights located just forward of the class divider are lighted with a very dim glow.

(13) Rotate aft VALANCE LIGHTS CONTROL switch CCW from BRT, through DIM, to OFF position, and verify that all the valance lights decrease smoothly in brightness and then go out.

(14) Turn off electrical power (Ref. 24-00-00).

AISLE LIGHTS - REMOVAL AND INSTALLATION

1. Referenced Procedures

R 24-00-00 Electrical Power - Maintenance Practices

2. Removal/Installation

A. Removal

(1) On pilots overhead circuit breaker panel CB1, zone 210, open and tag circuit breaker MISC - AISLE LIGHTS (L5).

On Flight Engineer/Second Officers overhead circuit breaker panel CB2, zone 215, open and tag circuit breakers AISLE LT - FWD (A10) and AFT (A11).

(2) Disengage fasteners securing applicable ceiling panel and swing panel down.

NOTE: Ceiling panels hinged on inboard side.

(3) Remove boots, then remove and tag wires on aisle light assembly (Ref. Fig. 401).

(4) Remove screws securing aisle light assembly to ceiling panel.

(5) Pull off bezel and pass through opening in ceiling panel, then remove aisle light assembly.

B. Installation

(1) Verify that circuit breakers opened in Step 2A(1) are open and tagged.

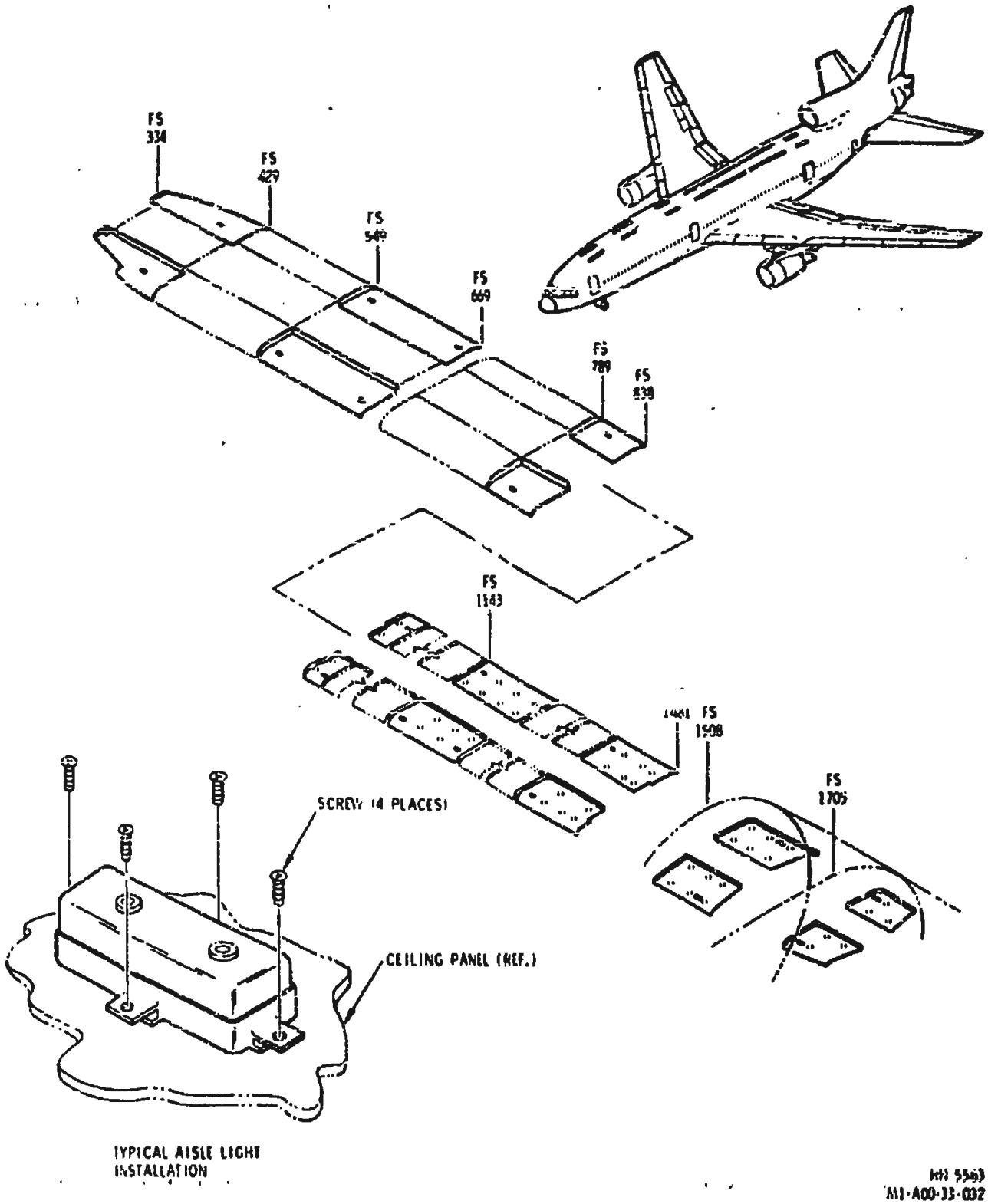
(2) Pass bezel through opening in ceiling panel. Position aisle light assembly on ceiling panel and secure with screws.

(3) Close bezel.

(4) Remove wire tags and reconnect wires to aisle light assembly; install boots.

(5) Close ceiling panel.

(6) Remove tags and close circuit breakers opened in Step 2A(1).



TYPICAL AISLE LIGHT INSTALLATION

MI 5563
MI-A00-33-032

Aisle Lights - Removal and Installation
Figure 401

3. Relamping

A. Normal Lamp

(1) Turn off aisle lights.

(2) Pull down aisle light bezel and allow to hang by lanyard.

(3) Pull down light mask assembly.

(4) Remove faulty lamp.

(5) Install replacement lamp.

R (6) Turn on electrical power (Ref. 24-00-00).

(7) Turn on aisle lights to test lamp. Turn lights off after test.

R (8) Turn off electrical power (Ref. 24-00-00).

(9) Press light mask assembly into place.

NOTE: Light mask is adjustable to prevent spotlighting passengers when seat configuration is varied from normal.

(10) Press bezel into place.

B. Emergency Lamp

(1) On pilots eyebrow panel, zone 210, verify that EMERGENCY LIGHTING toggle switch is in OFF position.

(2) Remove bezel and light mask on aisle light to be relamped.

(3) Remove faulty lamp.

(4) Install replacement lamp.

(5) Test lamp by operating the momentary TEST switch on the applicable emergency power pack.

(6) Replace light mask and bezel.

NOTE: Light mask is adjustible to adjust for seating configuration.

SOFFIT LIGHTS - REMOVAL AND INSTALLATION

1. Referenced Procedure

R 24-00-00 Electrical Power - Maintenance Practices

2. Removal/Installation

A. Removal

(1) On aircraft 001-031,
on galley right circuit breaker panel, zone 130, open and tag the following circuit breakers:

CABIN LIGHTING - SOFFIT

FWD - 1 and 2

MID-FWD - 1 and 2

CENTER - MID and AFT - LH

MID and AFT - RH

On galley left circuit breaker panel, zone 130, open and tag the following circuit breakers:

PASS SERV BUS 1L:

CABIN LIGHTING - SOFFIT

FWD - 1 and 2

AFT

MID

DIM CONT MOTOR - FWD and AFT

DC GRD SERV BUS EXT:

CAB LTG SOFFIT CONT NO. 1 - FWD and AFT

(1) On aircraft 032-999,
C On FE/SO overhead circuit breaker panel open and tag
C the FWD CLOSET AND LAV LTS (K7) circuit breaker.

At galley left circuit breaker panel, zone 137, open and tag the following circuit breakers:

DC GND SVCE BUS EXT

CABIN LIGHTING - SOFFIT CONTROL FWD (J20)

CABIN LIGHTING - SOFFIT CONTROL AFT (J21)

PASS SVCE BUS 1A

CABIN LIGHTING - SOFFIT FWD (G13)

LIGHTING - SOFFIT CLASS DIVIDER A (G14)

LIGHTING - SOFFIT CLASS DIVIDER B (G15)

LIGHTING - SOFFIT AFT RH (G16)

LIGHTING - SOFFIT AFT CTR (G17)

LIGHTING - SOFFIT AFT LH (G18)

LIGHTING LAV ACT (F17)

LIGHTING LAV CONT (G22)

(2) Disengage fasteners securing ceiling panel, ar wing down hinged panel or remove nonhinged panel, as applicable.

(3) Remove cover from molded terminal block to gain access to terminal screws (Ref. Fig 401).

(4) Remove and tag wires.

(5) Pull lens assembly from light fixture.

(6) Disconnect lanyard and remove lens assembly.

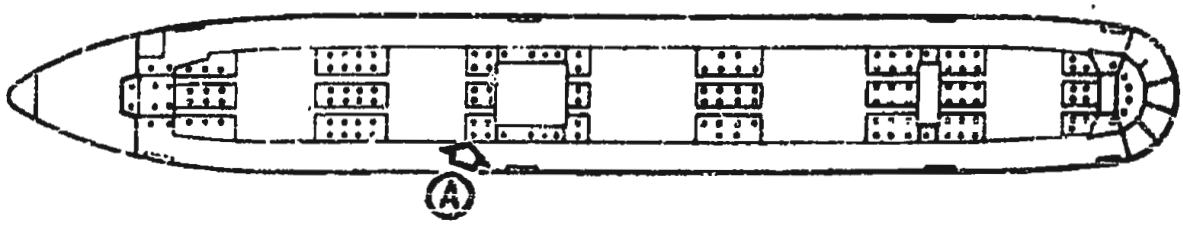
(7) Remove screws securing soffit light fixture to ceiling panel and remove fixture.

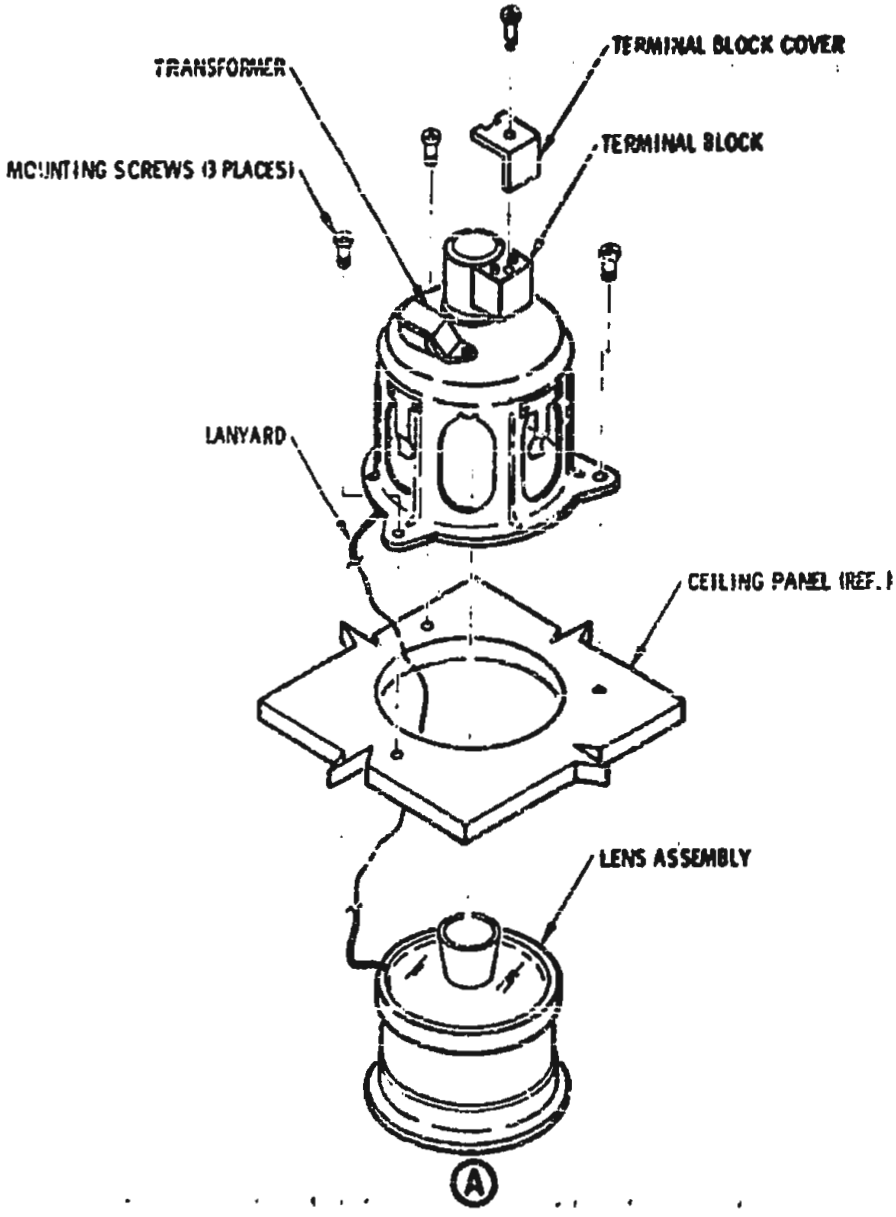
B. Installation

(1) Verify that circuit breakers opened in Step 2A(1) are open and tagged.

(2) Position soffit light assembly in ceiling panel and secure with screws.

(3) Remove tags and connect wires to light as follows: the 26V ac wire to the No. 6 screw terminal, and the ground wire to the No. 10 screw terminal.





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R

Soffit Lights - Removal and Installation
Figure 401

(4) Replace terminal block cover.

(5) Replace lanyard.

(6) Replace ceiling panel.

(7) Replace lens assembly.

(8) Remove tags and close circuit breakers opened in Step 2A(1).

3. Relamping

A. Soffit Lights

C (1) On forward or aft attendants panel, zone 220 or 270, as
C applicable, verify that CEILING or master lav
C switchlight, as applicable, is in OFF position.

(2) Pull lens assembly down and allow to hang by lanyard.

(3) Remove faulty lamp.

(4) Install new lamp.

R (5) Turn on electrical power (Ref. 24-00-00).

(6) Turn on ceiling lights to test lamp. Turn lights off after test.

R (7) Remove electrical power (Ref. 24-00-00).

(8) Replace lens assembly.

LUMINAIRE LIGHTS - REMOVAL AND INSTALLATION

1. Referenced Procedure

R 24-00-00 Electrical Power - Maintenance Practices

2. Removal/Installation

A. Removal

(1) On aircraft 001-031, on galley right circuit breaker panel, zone 130, open and tag the following circuit breakers:

CAB LTG LUMINAIRE DIM CONT

FWD (11E)

AFT (12E)

CABIN LIGHTING - LUMINAIRE - DISTRIBUTION

FWD (11F)

AFT (14F)

(1) On aircraft 032-999, on galley right circuit breaker panel, zone 137, open and tag the following circuit breakers:

CAB LTG LUMINAIRE

FWD 1 (11E)

FWD 2 (12E)

CABIN LIGHTING - LUMINAIRE

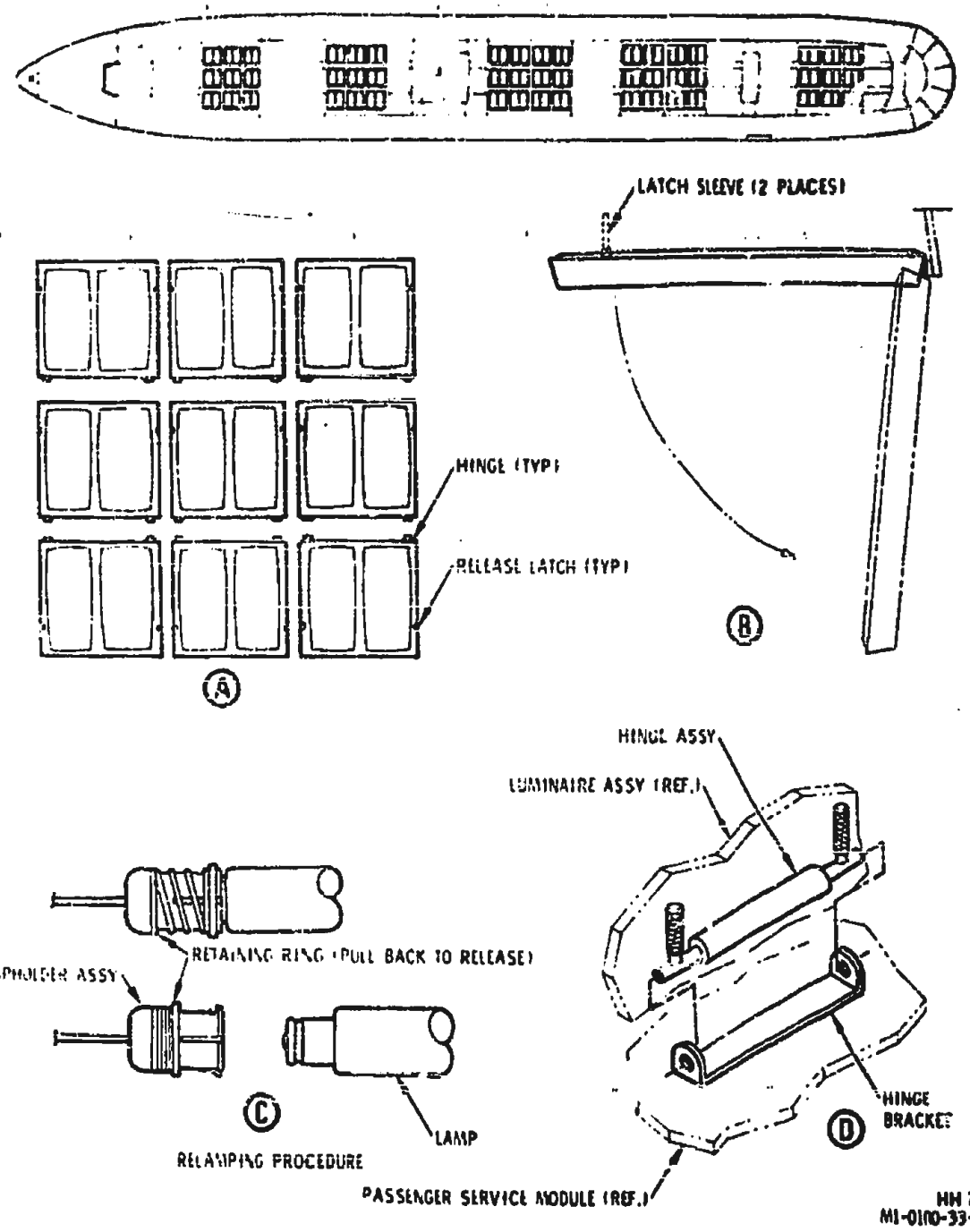
AFT 1 (11F)

AFT 2 (12F)

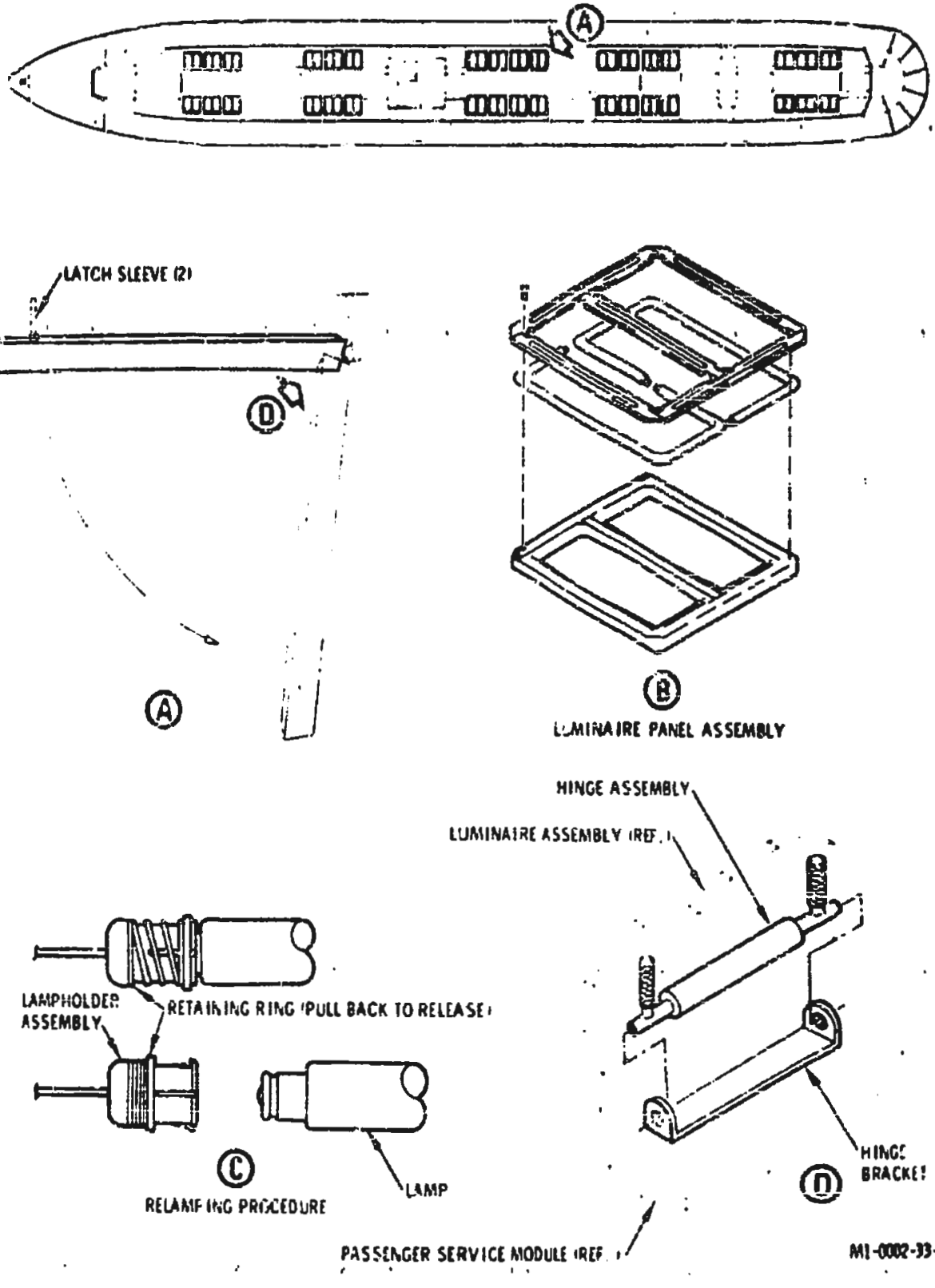
AFT 3 (13F)

AFT 4 (14F)

(2) Release latch on each side of luminaire assembly and swing luminaire assembly down (Ref. fig. 401).



R Luminaire Lights - Removal and Installation
R Figure 401



R Luminaire Lights - Removal and Installation
R Figure 401

R (3) Remove terminal board covers.

R (4) Tag wires and remove from terminal boards on each hinge assembly.

(5) On each hinge assembly, squeeze knurled handles together to retract hinge pins from hinge bracket.

(6) Remove luminaire assembly.

B. Installation

(1) Verify that circuit breakers opened in Step 2A(1) are open and tagged.

(2) Position luminaire assembly and secure hinges to hinge brackets (Ref. Fig. 401).

(3) Remove tags and connect wires to terminals of luminaire assembly.

R (4) Install terminal covers.

(5) Swing luminaire assembly up into position and secure latches.

(6) Remove tags and close circuit breakers opened in Step 2A(1).

3. Relamping

A. Luminaires

(1) On forward or aft attendants panel, zone 220 or 270, as applicable, verify that CEILING switchlight is in off position.

(2) Release latch on each side of luminaire assembly and swing luminaire assembly down (Ref. Fig. 401).

(3) Release quarter-turn fasteners and remove dust cover.

(4) Pull retaining rings back to release faulty lamp from lampholders. Remove lamp from spring clips.

(5) Install new lamp into spring clips. Pull retaining rings back and make lampholder connection to ends of lamp.

(6) Turn on electrical power (Ref. 24-00-00).

(7) Turn on ceiling lights to test lamp. Turn lights off after test.

(8) Turn off electrical power (Ref. 24-00-00).

(9) Install dust cover and secure with quarter-turn fasteners.

R (10) Swing luminaire assembly up into position and secure latches.

CROSS-AISLE LIGHT - REMOVAL AND INSTALLATION

1. Referenced Procedure

R 24-00-00 Electrical Power - Maintenance Practices

2. Removal/Installation

A. Removal

(1) On aircraft 001-031
on galley left circuit breaker panel, zone 130, open and tag circuit breakers CABIN LIGHTING - VALANCE - DISTR, and LIGHTING - CROSS AISLE

(1) On aircraft 032, 033,
on galley left circuit breaker panel, zone 130, open and tag the following circuit breaker:

LIGHTING - CROSS AISLE (E16)

(2) Depress two pushbuttons in end of light fixture to release cover (Ref. Fig. 401). Swing cover down.

NOTE: Ceiling panel may be lowered to facilitate light removal. Two 1-inch access holes are provided to release ceiling panel.

(3) Remove and tag wires on terminal block. Pass wires through grommet.

(4) Remove screws securing light to ceiling panel and remove light.

B. Installation

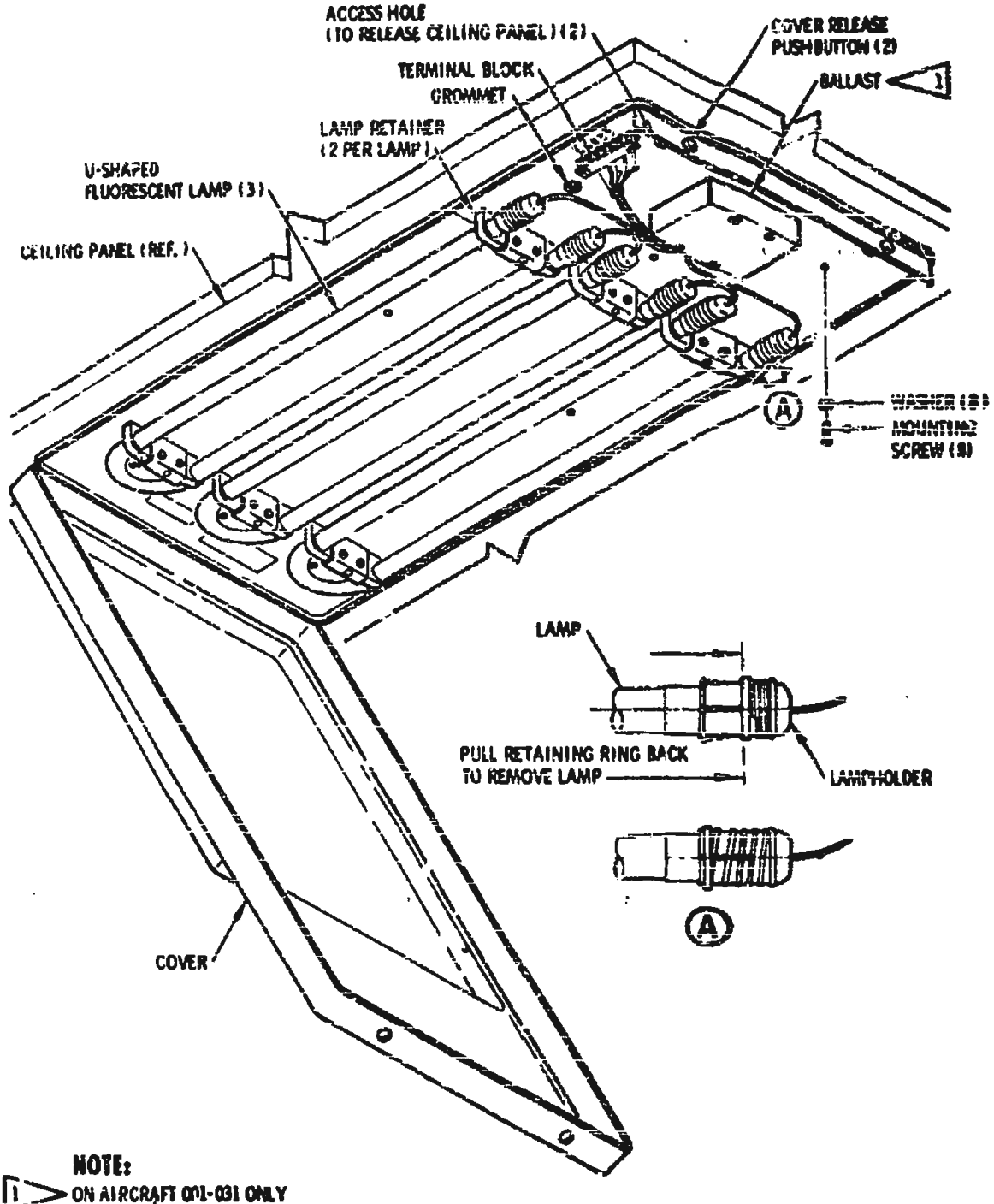
(1) Verify that circuit breakers opened in Step 2A(1) are open and tagged.

(2) Position light on ceiling panel and secure with screws (Ref. Fig. 401).

(3) Remove tags, feed wires through grommet, and connect to terminal block.

(4) If ceiling panel was lowered, swing up into position and secure.

(5) Close light cover.



NOTE:
1 ON AIRCRAFT 001-031 ONLY

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R Cross-aisle Light - Removal and Installation
R Figure 401

EFFECTIVITY: ALL

001B

(6) Remove tags and close circuit breakers open in Step 2A(1).

3. Relamping

A. Cross-aisle Light

(1) On galley lift control panel, verify that cross-aisle light control is turned off.

(2) Depress two pushbuttons in end of light fixture to release cover (Ref. Fig. 401). Swing cover down.

(3) Pull retaining rings of lampholders back and release ends of lamp (Ref. Fig. 401, View A).

(4) Release quarter-turn fasteners on each of the two lamp retainers.

(5) Remove faulty lamp along with lamp retainers.

(6) Install new lamp.

(7) Position lamp in assembly and secure lamp retainers with quarter-turn fasteners.

(8) Connect lampholders to ends of lamp.

(9) Turn on electrical power (Ref. 24-00-00).

(10) Turn on cross-aisle lights to test lamp. Turn lights off after test.

(11) Turn off electrical power (Ref. 24-00-00).

(12) Close light cover.

WINDOW VALANCE LIGHTS - REMOVAL AND INSTALLATION

1. Referenced Procedure

R 24-00-00 Electrical Power - Maintenance Practices

2. Removal/Installation

A. Removal

(1) On aircraft 001-031, on galley left circuit breaker panel, zone 130, open and tag circuit breaker CABIN LIGHTING - VALANCE - DISTR.

(1) On aircraft 032, 033, on galley left circuit breaker panel, 137, open and tag the following circuit breakers:

LIGHTING - VALANCE DISTR. FWD (F13)

LIGHTING - VALANCE DISTR. AFT LH (F14)

LIGHTING - VALANCE DISTR. AFT RH (F15)

CABIN LIGHTING - VALANCE CONTROL (K21)

(2) Release valance latches to gain access to light fixture. Allow valance panel to swing down.

(3) Remove cover from terminal block for access to terminal screws (Ref. Fig. 401).

(4) Disconnect and tag wires from terminal block.

(5) Remove screws securing each end of light fixture and remove fixture.

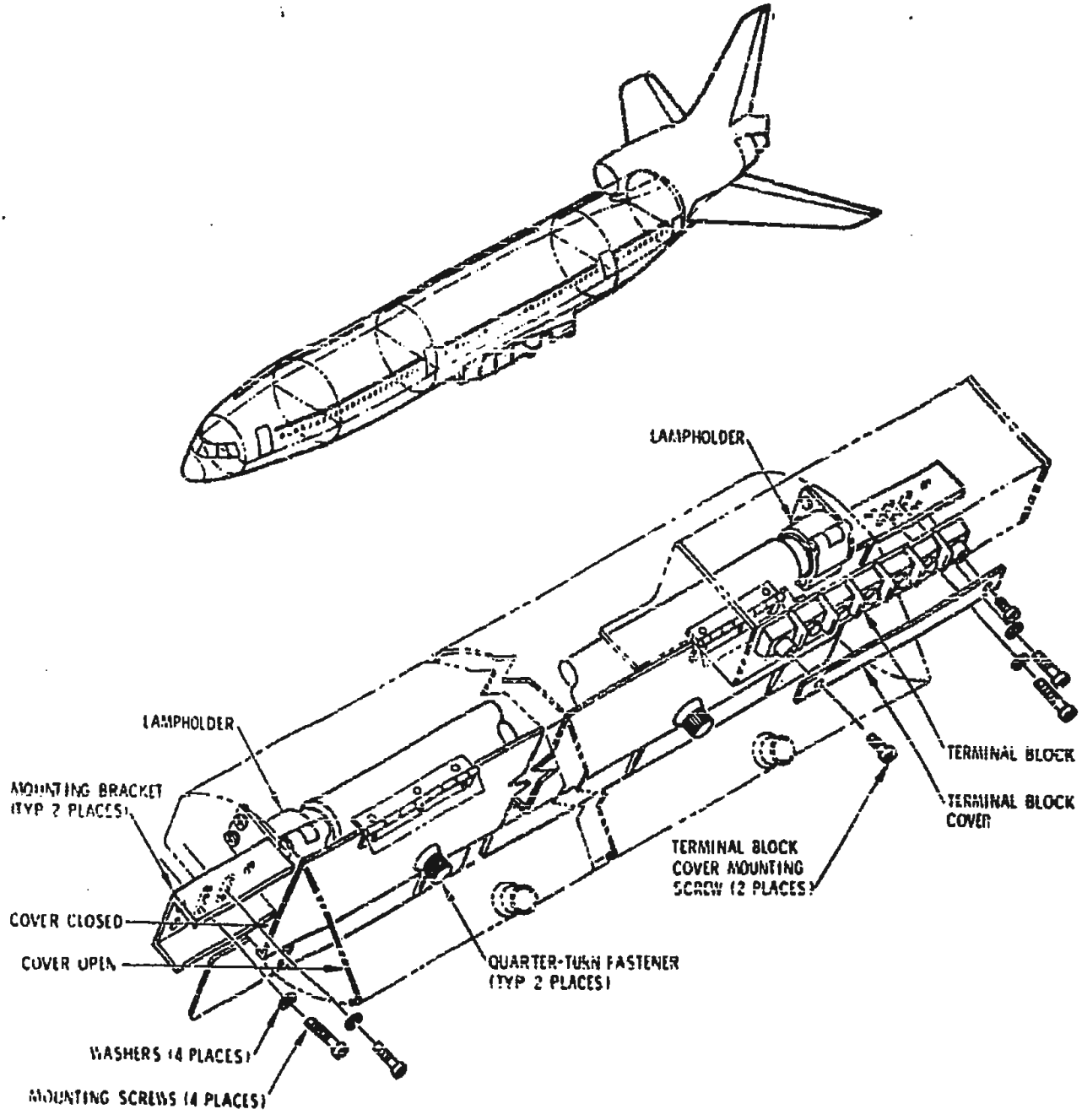
B. Installation

(1) Verify that circuit breaker opened in Step 2A(1) is open and tagged.

(2) Position light assembly and secure with screws at each end.

(3) Remove tags and connect wires to terminal block.

(4) Install cover on terminal block.



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Valance Light - Removal and Installation
Figure 401

(5) Rotate valance panel up and secure with latches.

(6) Remove tag and close circuit breaker opened in Step 2A(1).

3. Relamping

A. Valance Light

(1) On forward or aft cabin attendants panel, zone 220 or 270, as applicable, verify that WINDOW switchlight is in off position.

(2) Release valance latches and allow valance panel to swing down.

(3) Release quarter-turn fasteners and open cover (Ref. Fig. 401).

(4) Release lampholders and remove faulty lamp.

(5) Insert new lamp in lampholders. Secure lampholders.

R (6) Turn on electrical power (Ref. 24-00-00).

(7) Turn on window valance lights to test lamp. Turn lights off after test.

R (8) Turn off electrical power (Ref. 24-00-00).

(9) Close cover and secure quarter-turn fasteners.

(10) Rotate valance panel up and secure in place with latches.

MID SERVICE CENTER LIGHT - REMOVAL AND INSTALLATION

1. Referenced Procedure

R 24-00-00 Electrical Power - Maintenance Practices

2. Removal/Installation

A. Removal

(1) On galley left circuit breaker panel, zone 130, open and tag two circuit breakers LIGHTING - GALY.

(2) Release quarter-turn tri-wing fasteners (Ref. Fig. 401) and swing cover down.

(3) Remove and tag wires on terminal block.

(4) Remove screws securing light and remove light.

B. Installation

(1) Verify that circuit breakers opened in Step 2A(1) are open and tagged.

(2) Position light and secure with screws.

(3) Remove tags and connect wires to terminal block.

(4) Close cover and secure fasteners.

(5) Remove tags and close circuit breakers opened in Step 2A(1).

3. Relamping

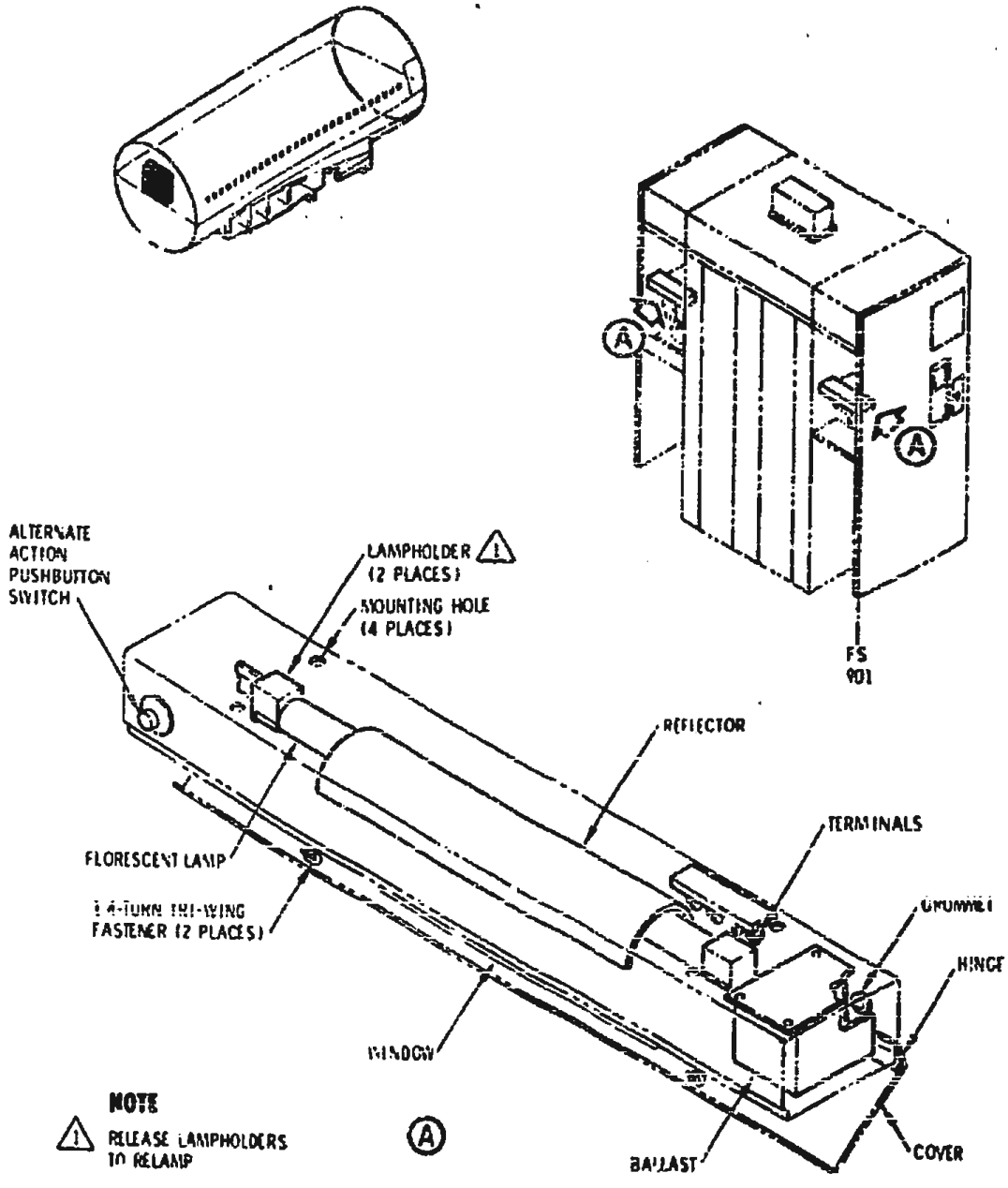
A. Mid Service Center Light

(1) Verify that light is turned off, or open circuit breakers [Ref. Step 2A(1)].

(2) Release quarter-turn fasteners and swing cover down (Ref. Fig. 401).

(3) Release lampholders and remove faulty lamp.

(4) Install new lamp and secure lampholders.



Mid Service Center Light - Removal and Installation
Figure 401

(5) Turn on electrical power (Ref. 24-00-00).

(6) Turn on light to test lamp. Turn light off after test.

R (7) Turn off electrical power (Ref. 24-00-00).

(8) Close cover and secure fasteners.

CABIN LIGHT CONTROL RHEOSTAT - REMOVAL AND INSTALLATION

1. Referenced Procedures

24-00-00 Electrical Power - Maintenance Practices

2. Removal/Installation

A. Removal

(1) On galley left circuit breaker panel, zone 131, open and tag the following circuit breakers:

CABIN LIGHTING

DIM CONT MOT - FWD AND AFT

R LUMINAIRE VALANCE CONTROL - CROSS AISLE and MA

LIGHTING - CROSS AISLE

On galley right circuit breaker panel, zone 131, open and tag circuit breaker CAB LTG - LUMINAIRE DIM CONT - FWD AND AFT.

(2) Remove knob and panel mounting screws to gain access to rheostat.

(3) Remove rheostat mounting hardware.

(4) Disconnect and tag leads from rheostat.

R CAUTION: CIRCUIT BREAKERS OPENED IN STEP 1 MUST BE OPENED BEFORE DISCONNECTING LEADS, OR DAMAGE TO THE SIDEWALL VALANCE AND CROSS AISLE LIGHTING MAY RESULT.

B. Installation

(1) Verify that circuit breakers opened in Step 2A(1) are opened and tagged.

(2) Place rheostat in mounting, verify that keying tab is in slot provided and secure with mounting hardware.

NOTE: Regardless of where original mounting hardware was, place lock washer and nuts on outside of panel.

(3) Remove tags and connect leads to rheostat.

(4) Place panel in position and fasten with mounting hardware.

(5) Remove tags and close circuit breakers opened in Step 2A(1).

(6) Energize electrical system (Ref. 24-00-00).

(7) Depress appropriate adjacent switchlight to on and rotate rheostat clockwise and counterclockwise. Verify that applicable lights come on and that the intensity varies with control knob position.

NOTE: Cross aisle switch is located on galley lift panel integral with rheostat so that it is only necessary to turn control knob to turn on and vary intensity of cross aisle lights.

(8) Deenergize electrical power system (Ref. 24-00-00).

MOTOR-DRIVEN DIMMING CONTROLLER - REMOVAL AND INSTALLATION

1. Referenced Procedure

   24-41-00 External Power/Ground Service System - Maintenance Practices

2. Removal/Installation

   A. Removal

      (1) On galley left circuit breaker panel, zone 130, open and tag all PASS SERV BUS IL circuit breakers CABIN LIGHTING - SOFFIT.

      (2) Disconnect both electrical connectors from the dimming controller in mid electrical service center, zone 137.

      NOTE: The aft dimming controller is the larger of the two controllers.

      (3) Remove screws and washers that secure the dust cover to the controller assembly. Remove the dust cover.

      (4) Remove the bolts that secure the controller assembly to the supports. Remove the controller assembly.

   B. Installation

      (1) Verify that circuit breakers opened in Step 2A(1) are open and tagged.

      (2) Secure the controller assembly to the supports with bolts.

      NOTE: The side of the controller assembly containing the electrical receptacles must face outboard.

      (3) Install the dust cover and secure with screws and washers.

      (4) Connect both electrical connectors.

      (5) Close circuit breakers opened in Step 2A(1).

      (6) Turn on electrical power (Ref. 24-41-00).

      (7) On the CLASS DIVIDER LOCATION panel, zone 250, set OVHD LUMINAIRES to STA 711-750 (forward controller) or STA

471 (aft controller); set SOFFIT LTS to STA 801-824 (forward controller) or STA 388 (aft controller).

(8) At the forward or aft attendants panel, as applicable, depress the CEILING switchlight to the on position.

(9) Slowly rotate the CEILING dimming control through its entire range from DIM to BRT, and back to DIM. At the DIM position, the lights must be off. Verify that the light intensity varies smoothly.

(10) Depress the CEILING switchlight to the off position.

(11) At the CLASS DIVIDER LOCATION panel, set the conversion switches to the positions required for the first class/coach loading configuration.

(12) Turn off electrical power (Ref. 24-41-00).

DC POWER SUPPLY - REMOVAL AND INSTALLATION

1. Referenced Procedure

   33-21-19 DC Power Supply - Adjustment and Test

2. Removal/Installation - Transformer

   A. Removal

      (1) On galley circuit breaker panels, zone 130, open and tag applicable circuit breaker for the component to be removed (Ref. Table 401).

Circuit Breakers
Table 401

COMPONENT	PANEL	BUS	CIRCUIT BREAKER
Luminaire transformer or rectifier	Right	PASS SERV BUS 1R	CABIN LIGHTING - LUMINAIRE - DISTRIBUTION - FWD or AFT
Cross-aisle & Sidewall light transformer or rectifier	Left	PASS SERV BUS 1L	LIGHTING - VALANCE - DISTR

      (2) Locate transformer in mid electrical service center (Ref. Fig. 401).

      (3) Disconnect electrical connector J3 at rectifier assembly.

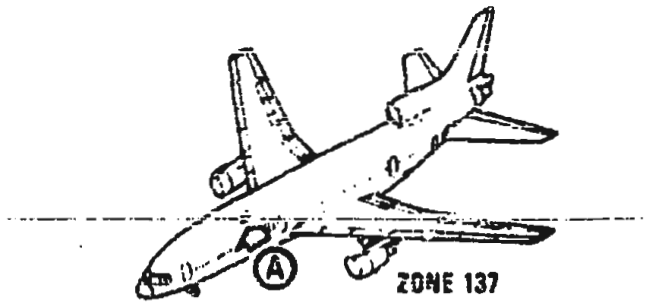
      (4) Remove bolts that secure transformer to supports. Remove transformer.

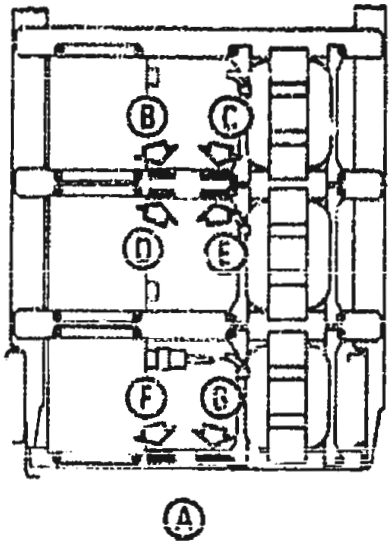
   B. Installation

      (1) Verify that circuit breaker opened in Step 2A(1) is open and tagged.

      (2) Secure transformer to supports with bolts.

      (3) Connect transformer electrical connector to receptacle J3 on rectifier assembly.





FWD LUMINAIRE RECTIFIER
(B)

FWD LUMINAIRE TRANSFORMER
(C)

AFT LUMINAIRE RECTIFIER
(D)

AFT LUMINAIRE TRANSFORMER
(E)

CROSS-AISLE & SIDEWALL LT RECTIFIER
(F)

CROSS-AISLE & SIDEWALL LT TRANSFORMER
(G)

MA 2577
MI-0100-33-404

DC Power Supply Locations
Figure 401

(4) Remove tag and close circuit breaker opened in Step 2A(1).

(5) Perform dc power supply operational test (Ref. 33-21-19).

3. Removal/Installation - Rectifier Assembly

A. Removal

(1) Open and tag applicable circuit breaker for the component to be removed (Ref. Table 401).

(2) Locate rectifier assembly in mid electrical service center (Ref. Fig. 401).

(3) Disconnect electrical connectors J1, J2, and J3.

(4) Remove bolts that secure rectifier assembly to supports and remove rectifier assembly.

B. Installation

(1) Verify that circuit breaker opened in Step 3A(1) is open and tagged.

(2) Secure rectifier assembly to supports with bolts.

(3) Connect electrical connectors to receptacles J1, J2, and J3 on rectifier assembly.

(4) Remove tag and close circuit breaker opened in Step 3A(1).

(5) Perform dc power supply operational test (Ref. 33-21-19).

DC POWER SUPPLY - ADJUSTMENT AND TEST

1. Adjustment/Test

The operational test provided herein is applicable to the three DC power supplies in the cabin lighting system.

2. Referenced Procedure

R 24-00-00 Electrical Power - Maintenance Practices

3. Operational Test

A. Preparation

R (1) Turn on electrical power (Ref. 24-00-00).

(2) On galley left circuit breaker panel, zone 130, verify that the following circuit breakers are closed:

DC GRD SVCE BUS EXT

CABIN LIGHTING - LUMINAIRE VALANCE CONTROL (3)

PASS SERV BUS I L

LIGHTING - CROSS AISLE

LIGHTING - VALANCE (3)

DIM CONT MOTOR (2)

On galley right circuit breaker panel, zone 130, verify that the following circuit breakers are closed:

PASS SERV BUS I R

CAB LTG - LUMINAIRE DIM CONT (2)

CABIN LIGHTING - LUMINAIRE DISTRIBUTION (2)

(3) At the CLASS DIVIDER LOCATION panel, set the OVHD LUMINAIRES CONVERSION SW to STA 711-750.

B. Forward Luminaire Power Supply

(1) At the forward attendants panel, depress the CEILING switchlight to the on position and rotate the CEILING dimming control to full BRT.

(2) At the aft attendants panel, depress the CEILING switchlight to the on position and rotate the CEILING dimming control to full BRT. Verify that all luminaires in the forward nine rows (27 luminaires) are brightly lighted.

(3) In the mid electrical service center, zone 137, check the forward luminaire power supply for smoke or excessive heating.

(4) Depress the CEILING switchlight at both forward and aft attendants panels to the off position.

(5) At the CLASS DIVIDER LOCATION panel, reset the conversion switch to its proper position.

C. Aft Luminaire Power Supply

(1) At the aft attendants panel, depress the CEILING switchlight to the on position and rotate the CEILING dimming control to full BRT. Verify that all luminaires in the aft eight rows (24 luminaires) are brightly lighted.

(2) In the mid electrical service center, zone 137, check the aft luminaire power supply for smoke or excessive heating.

(3) Depress the CEILING switchlight at the aft attendants panel to the off position.

D. Cross-aisle and Sidewall Lights Power Supply

(1) At the CLASS DIVIDER LOCATION panel, set the SIDEWALL VALANCE LTS CONVERSION SW to the ALL TOURIST position.

(2) At the forward attendants panel, depress the WINDOW switchlight to the on position and rotate the WINDOW dimming control to full BRT. Verify that all sidewall lights are brightly lighted.

(3) At the upper lift control panel, rotate the cross-aisle control to full BRT and verify that the cross-aisle lights are brightly lighted.

(4) In the mid electrical service center, zone 137, check the cross-aisle and sidewall lights power supply for smoke or excessive heating.

(5) At the upper lift control panel, rotate the cross-aisle control fully CCW to the off position.

(6) At the forward attendants panel, depress the WINDOW switchlight to the off position.

(7) At the CLASS DIVIDER LOCATION panel, reset the conversion switch to the proper position.

E. Completion

R (1) Turn off electrical power (Ref. 24-00-00).

SOLID-STATE DIMMING CONTROL UNIT - REMOVAL AND INSTALLATION

1. Referenced Procedure

33-21-00 Aisle and Ceiling Lighting - Adjustment and Test

2. Removal/Installation

A. Removal

(1) On the galley circuit breaker panels, zone 130, open and tag the applicable circuit breaker as specified in Table 401.

Circuit Breakers
Table 401

DIMMING CONTROL UNIT	GALLEY CIRCUIT BREAKER PANEL	BUS	OPEN CIRCUIT BREAKER
Forward Luminaire			CAB. LTG - LUMINAIRE DIM CONT - FWD
	Right		
Aft Luminaire			CAB. LTG - LUMINAIRE DIM CONT - FWD AND AFT
Forward Valance			LIGHTING - VALANCE DIM CONT - FWD
	Left	PASS SERV BUS 1L	
Aft Valance			LIGHTING - VALANCE DIM CONT -FWD AND AFT
Cross Aisle			LIGHTING - CROSS AISLE

(2) Disconnect the electrical connector (Ref. Fig. 401).

(3) Remove the screws and flat washers that secure the dimming control unit. Remove the unit.

B. Installation

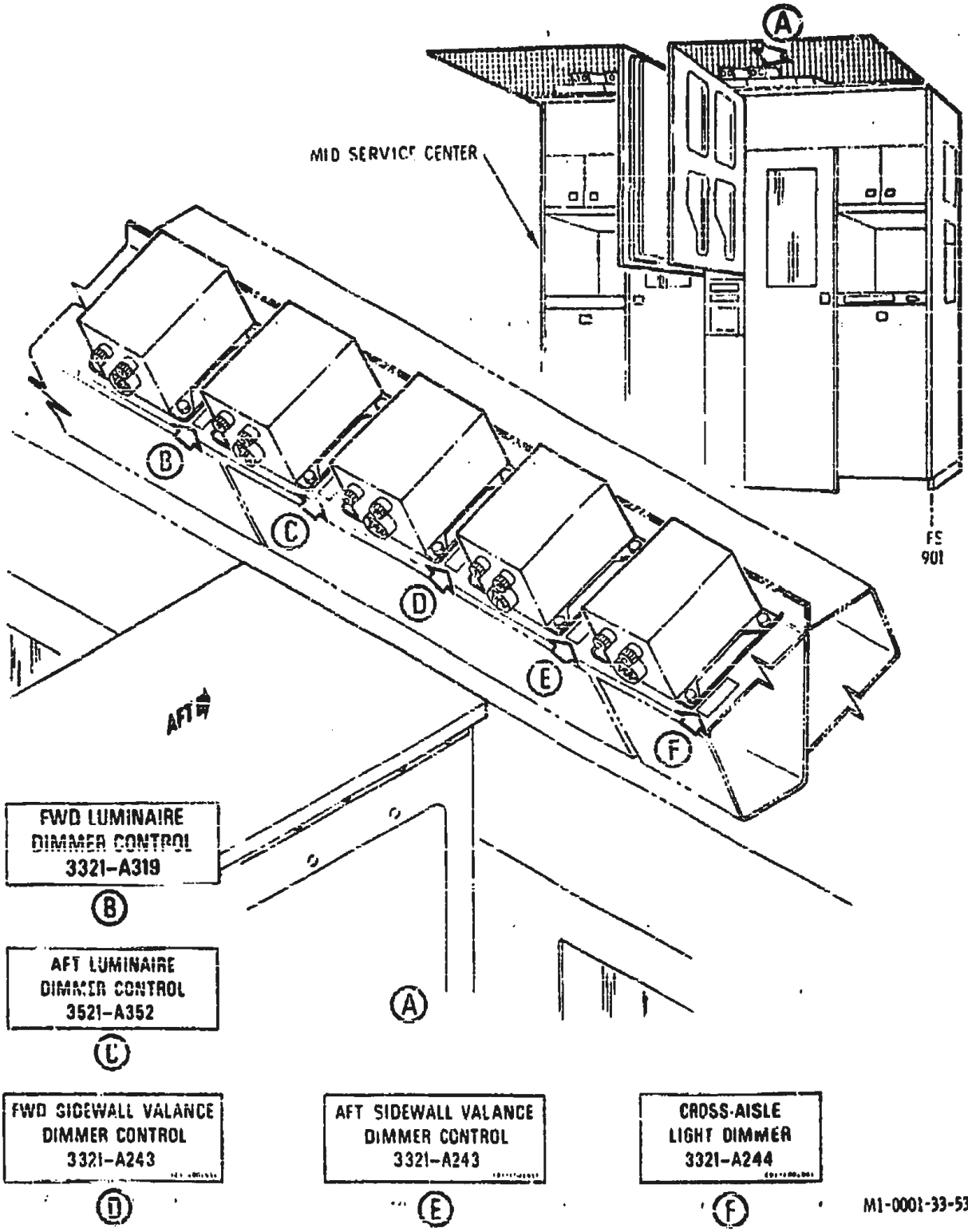
(1) Verify that the circuit breaker opened in Step 2A(1) is open and tagged.

(2) Install the dimming control unit and secure with screws and flat washers (Ref. Fig. 401).

(3) Connect electrical connector to jack on dimming control unit.

(4) Remove tag and close circuit breaker opened in Step 2A(1).

(5) Perform the applicable portions of the aisle and ceiling lighting operational test (Ref. 33-21-00) to test the dimming control unit.



R R Luminaire, Valance and Cross Aisle Dimmer Locations
Figure 401

EFFECTIVITY: 001-031

001B

CLASS DIVIDER SELECTOR SWITCH PANEL - REMOVAL AND INSTALLATION

1. Referenced Procedure

24-41-00 External Power/Ground Service System - Maintenance Practices

33-21-00 Aisle, Ceiling and Buffet Lighting - Adjustment and Test

2. Removal/Installation

A. Removal

(1) On galley left circuit breaker panel, zone 130, open and tag the following circuit breakers:

LIGHTING - CROSS AISLE

LIGHTING - VALANCE - DISTR AND DIM. CONT - FWD AND AFT

CABIN LIGHTING - SOFFIT - FWD 1 AND 2, MID AND AFT

R CABIN LIGHTING - DIM CONT MOTOR - FWD AND AFT

CABIN LIGHTING SOFFIT - CONT NO. 1 - FWD AND AFT

CABIN LIGHTING - LUMINAIRE VALANCE CONTROL - MA, CVRSN, AND CROSS AISLE

On galley right circuit breaker panel, zone 130, open and tag the following circuit breakers:

CAB LTG - LUMINAIRE DIM CONT - FWD AND AFT

CABIN LIGHTING - LUMINAIRE - DISTRIBUTION - FWD AND AFT

(2) Gain access to class divider switch panel by unfastening ceiling panels forward of the mid service center (Ref. Fig. 401).

(3) Remove screws securing class divider switch panel.

(4) Remove class divider switch panel and disconnect panel connectors.

B. Installation

(1) Verify that circuit breakers opened in Step 2A(1) are opened and tagged.

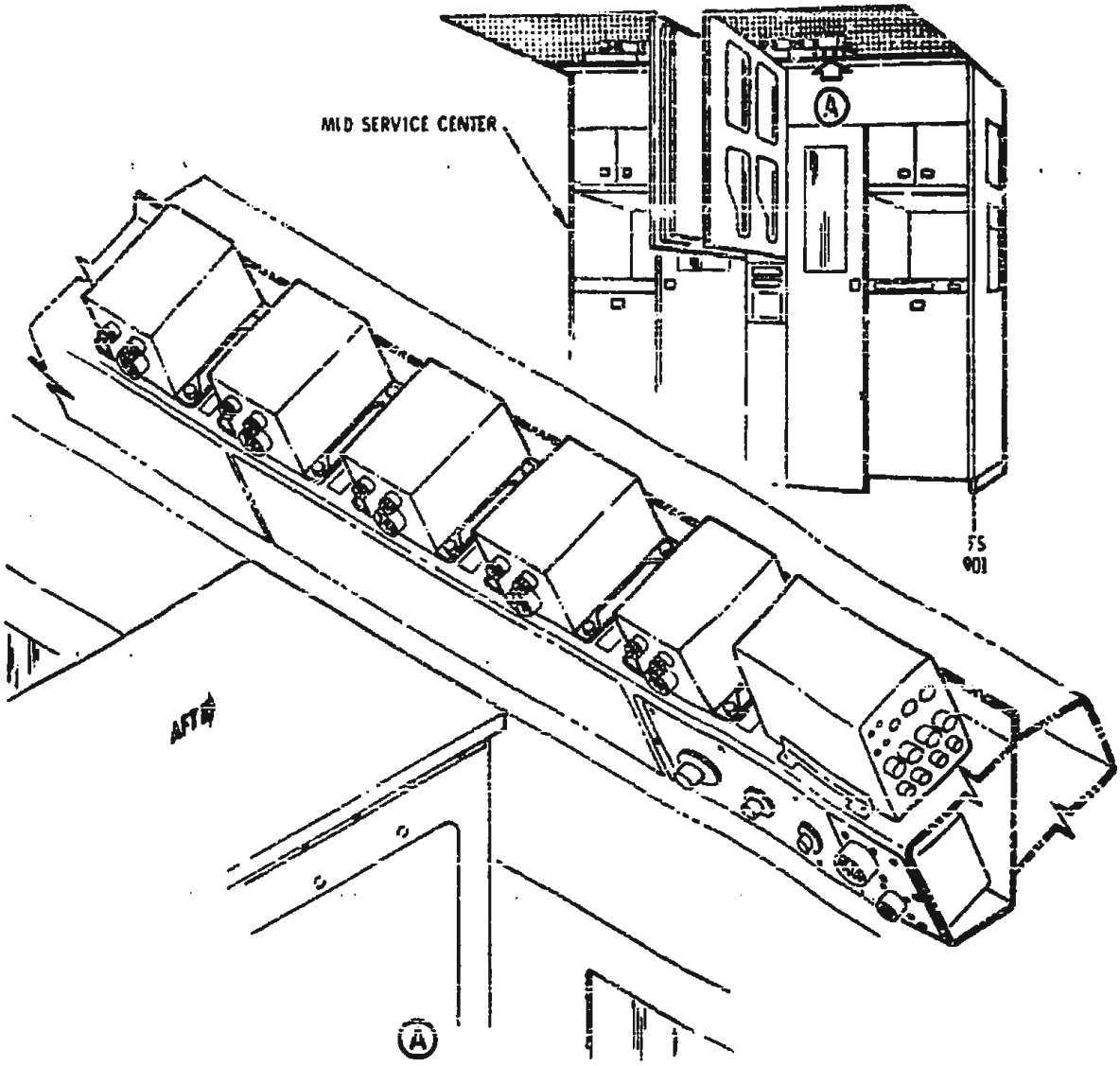
(2) Connect class divider switch panel connectors.

(3) Position class divider switch panel and secure with screws.

(4) Turn on electrical power (Ref. 24-41-00).

(5) Verify that class divider switches are operating correctly (Ref. 33-21-00).

(6) Turn off electrical power (Ref. 24-41-00).



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Class Divider Switch Panel Location
Figure 401

FORWARD BEVERAGE BAR CART AND BLENDER FLUORESCENT LIGHT FIXTURE REMOVAL AND INSTALLATION

1. Referenced Procedure

24-41-00 External Power/Ground Service System - Maintenance Practices

2. Removal/Installation

A. Removal

(1) On forward beverage bar, open and tag circuit breaker LIGHTS.

(2) Release quarter-turn fasteners and open hinged cover.

(3) Remove and tag aircraft wires from ballast terminals 1, 2, 3, and STG.

(4) Release clamps securing wire harness. Withdraw wires through grommet and release wire harness from clamps.

(5) Close cover and secure with quarter-turn fasteners.

(6) Remove screws securing upper hinges and support light fixture as it rotates downward.

(7) Support light fixture and grasp lower hinge release handles and release hinges. Remove light fixture.

B. Installation

(1) Verify that circuit breaker opened in Step 2A(1) is opened and tagged.

(2) Position light fixture so lower hinge halves on light fixture align with hinge halves on beverage bar. Secure lower hinges.

(3) Rotate light fixture upward and secure upper hinges to beverage bar with screws.

(4) Release quarter-turn fasteners and open hinged cover.

(5) Install wire harness in clamps and feed wires through grommet. Secure clamps.

(6) Connect wires to ballast terminals 1, 2, 3, and STG and remove tags.

(7) Close cover and secure with quarter-turn fasteners.

(8) Remove tag and close circuit breaker opened in Step 2A(1).

(9) Turn on electrical power (Ref. 24-41-00).

(10) On galley left circuit breaker panel, zone 130, verify that PASS SERV BUS IL circuit breakers SVCE CENTER - FWD - BVGE BAR are closed.

(11) On forward beverage bar, place blender fluorescent light switch in alternately dim, bright, and off positions, and verify that all six lamps light dimly, brightly, and go out.

(12) Turn off electrical power (Ref. 24-41-00).

3. Relamping

A. Cart and Blender Fluorescent Light

(1) Verify that blender fluorescent light switch is place in the off position.

(2) Release quarter-turn fasteners and open hinged cover.

(3) Release lampholders at each end of lamp and remove lamp.

(4) Install replacement lamp and secure with lampholders.

(5) Close cover and secure with quarter-turn fasteners.

(6) Turn on electrical power (Ref. 24-41-00).

(7) On forward beverage bar, place blender fluorescent light switch alternately in dim, bright, and off position, and verify that lamp lights dimly, brightly, and goes out.

(8) Turn off electrical power (Ref. 24-41-00).

FORWARD BEVERAGE BAR COFFEE MAKER FLUORESCENT LIGHT FIXTURE REMOVAL AND INSTALLATION

1. Referenced Procedure

24-41-00 External Power/Ground Service System - Maintenance Practices

2. Removal/Installation

A. Removal

(1) On the forward beverage bar, open and tag circuit breaker LIGHTS.

(2) Release the valance panel latches and rotate 180 degrees to maintenance position.

(3) Release quarter-turn fasteners and open cover of light assembly.

(4) Remove terminal block cover. Tag and remove wires from terminal block.

(5) Withdraw wires through opening in light assembly. Loosen harness clamp and remove wires from clamp.

(6) Remove screws that secure light assembly to valance panel. Remove light assembly.

B. Installation

(1) Verify that circuit breaker opened in Step 2A(1) is open and tagged.

(2) Position light assembly on valance panel and secure with screws.

(3) Install wire harness in clamp and insert wires through opening in light assembly. Secure clamp.

(4) Connect wires to terminal block and remove tags. Install terminal block cover.

(5) Close light assembly cover and secure with quarter-turn fasteners.

(6) Rotate valance panel and light assembly upward 180 degrees to utility position. Secure valance panel latches to beverage bar.

(7) Remove tag and close circuit breaker opened in Step 2A(1).

(8) Turn on electrical power (Ref. 24-41-00).

(9) On galley left circuit breaker panel, zone 130, verify that PASS SERV BUS IL circuit breakers SVCE CENTER - FWD - BVGE BAR are closed.

(10) On the forward beverage bar depress the coffee fluorescent light rocker switch to the dim position and verify that both fluorescent lamps light dimly.

(11) Depress the rocker switch to the bright position and verify that both fluorescent lamps light brightly.

(12) Depress the rocker switch to the off position and verify that the lamps go out.

(13) Turn off electrical power (Ref. 24-41-00).

3. Relamping

A. Forward Beverage Bar Coffeemaker Fluorescent Light

(1) On forward beverage bar, verify that rocker switch for coffeemaker fluorescent light is placed in off position.

(2) Release latches and rotate valance panel and light assembly 180 degrees to maintenance position.

(3) Release quarter-turn fasteners and open cover of light assembly.

(4) Release lampholders on each side of fluorescent lamp and remove lamp.

(5) Install replacement lamp and secure with lampholders.

(6) Close cover and secure with quarter-turn fasteners.

(7) Rotate valance panel and light assembly upward 180 degrees to utility position. Secure valance panel latches to beverage bar.

(8) Turn on electrical power (Ref. 24-41-00).

R (9) Depress rocker switch to the dim position and verify
R that fluorescent lamps light dimly.

R (10) Depress rocker switch to bright position and verify
R that lamps light brightly.

R (11) Depress rocker switch to off position and verify that
R lamps go out.

R (12) Turn off electrical power (Ref. 24-41-00).

FORWARD SERVICE CENTER FLUORESCENT LIGHTING FIXTURE REMOVAL AND INSTALLATION

1. Referenced Procedure

24-41-00 External Power/Ground Service System - Maintenance Practices

2. Removal/Installation

A. Removal

(1) On forward beverage bar, open and tag circuit breaker LIGHTS.

(2) On the forward service center fluorescent light fixture, release the quarter-turn fasteners and open hinged cover.

(3) Remove terminal block cover. Tag and remove HV, DIM, GND, and STG wires. Pass wires through grommet.

(4) Remove screws securing light fixture to service center, and remove light fixture.

B. Installation

(1) Verify that circuit breaker opened in Step 2A(1) is open and tagged.

(2) Position light fixture on service center and secure with screws.

(3) Feed aircraft wires through grommet and connect to HV, DIM, GND, and STG terminals. Remove wire tags.

(4) Install terminal block cover.

(5) Close cover and secure with quarter-turn fasteners.

(6) Remove tag and close circuit breaker opened in Step 2A(1).

(7) Turn on electrical power (Ref. 24-41-00).

(8) On galley left circuit breaker panel, zone 130, verify that PASS SERV BUS IL circuit breakers SVCE CENTER - FWD - BVGE BAR are closed.

R (9) Place the forward service center fluorescent light rocker switch alternately in the dim, bright, and off position and verify that the lamp lights dimly, brightly, and goes out.

R (10) Turn off electrical power (Ref. 24-41-00).

R 3. Relamping

R A. Forward Service Center Fluorescent Light

R (1) Verify that rocker switch is placed in off position.

R (2) Release quarter-turn fasteners and open hinged cover.

R (3) Release lampholders.

R (4) Release lamp retainers from light fixture and remove lamp with lamp retainers.

R NOTE: Replacement lamp will be fitted with lamp retainers.

R (5) Install replacement lamp and secure lamp retainers to light fixture.

R (6) Connect lampholders to ends of lamp.

R (7) Close cover and secure with quarter-turn fasteners.

R (8) Turn on electrical power (Ref. 24-41-00).

R (9) Place the forward service center fluorescent light rocker switch alternately in the dim, bright, and off position and verify that the lamp lights dimly, brightly, and goes out.

R (10) Turn off electrical power (Ref. 24-41-00).

AFT SERVICE CENTER FLUORESCENT LIGHT, UPPER ASSEMBLY REMOVAL AND INSTALLATION

1. Referenced Procedure

24-41-00 External Power/Ground Service System - Maintenance Practices

2. Removal/Installation

A. Removal

(1) On aft service center, open and tag circuit breaker LIGHTS.

(2) On upper section of aft service center, open facia cover.

(3) Press cover release buttons and swing cover upward to open.

(4) Release lampholders from ends of fluorescent lamp.

(5) Release quarter-turn fasteners that secure lamp retainers to light fixture and remove lamp (along with retainers).

(6) Remove terminal block cover. Tag and remove aircraft wires HV, DIM, GND, and STG. Carefully pull wiring out through grommet.

(7) Remove screws that secure light fixture to aft service center upper assembly. Remove light fixture.

B. Installation

(1) Verify that circuit breaker opened in Step 2A(1) is opened and tagged.

(2) Position light fixture in place in aft service center upper assembly and secure with screws.

(3) Carefully insert aircraft wiring through grommet. Connect wires HV, DIM, and GND to terminals of terminal block. Connect wire STG to ground connection on light fixture. Remove wire tags and install terminal block cover.

(4) Install fluorescent lamp and secure in place with quarter-turn fasteners.

(5) Connect lampholders to ends of fluorescent lamp.

(6) Swing cover downward to close. Verify that cover release buttons lock into place.

(7) Replace facia cover on upper section of aft service center.

(8) Remove tag and close circuit breaker opened in Step 2A(1).

(9) Turn on electrical power (Ref. 24-41-00).

(10) On galley left circuit breaker panel, zone 130, verify that circuit breaker GALLEY AC BUS 2 - SVCE CTR AFT is closed.

(11) On aft service center, depress the upper fluorescent lights rocker switch alternately to the dim, bright, and off position and verify that the lights come on dimly, brightly, and go out.

(12) Turn off electrical power (Ref. 24-41-00).

3. Relamping

A. Aft Service Center Fluorescent Light, Upper Assembly

(1) On aft service center, verify that rocker switch for upper assembly is placed in off position.

(2) Open upper section facia cover.

(3) Press cover release buttons and swing cover upward to open.

(4) Release lampholders from ends of fluorescent lamp.

(5) Release quarter-turn fasteners that secure lamp retainers to light fixture, and remove lamp with retainers.

NOTE: Replacement lamp will have lamp retainers installed.

(6) Install replacement lamp. Secure lamp retainers to light fixture with quarter-turn fasteners.

R (7) Connect lampholders to ends of fluorescent lamp.

R (8) Swing cover downward and close. Verify that cover
R release buttons lock into place.

R (9) Replace facia cover on upper section of aft service
R center.

R (10) Turn on electrical power (Ref. 24-41-00).

R (11) On aft service center, depress the upper fluorescent
R lights rocker switch alternately to the dim, bright,
R and off position and verify that the replacement lamp
R comes on dimly, brightly, and goes out.

R (12) Turn off electrical power (Ref. 24-41-00).

AFT SERVICE CENTER FLUORESCENT LIGHT, LOWER ASSEMBLY REMOVAL AND INSTALLATION

1. Referenced Procedure

24-41-00 External Power/Ground Service System - Maintenance Practices

2. Removal/Installation

A. Removal

(1) On aft service center, open and tag circuit breaker LIGHTS.

(2) On lower fluorescent light fixture, press both cover release buttons and swing cover downward to open.

(3) Remove terminal block cover. Tag and remove aircraft wires HV, DIM, GND, and STG. Carefully pull wiring out through hole in light fixture.

(4) Remove screws securing light fixture to underside of aft service center upper assembly. Remove light fixture.

B. Installation

(1) Verify that circuit breaker opened in Step 2A(1) is open and tagged.

(2) Position light fixture in place on underside of aft service center upper assembly and secure with screws.

(3) Carefully feed aircraft wiring through hole in side of light fixture. Connect wires HV, DIM, and GND to terminals of terminal block. Connect wire STG to ground connection on light fixture. Remove wire tags and install terminal block cover.

(4) Close cover and verify that cover release buttons lock into place.

(5) Remove tag and close circuit breaker opened in Step 2A(1).

(6) Turn on electrical power (Ref. 24-41-00).

(7) On galley left circuit breaker panel, zone 130, verify that circuit breaker GALLEY AC BUS 2 - SVCE CTR AFT is closed.

(8) On aft service center, depress the lower fluorescent lights rocker switch alternately to the dim, bright, and off position and verify that the lights come on dimly, brightly, and go out.

(9) Turn off electrical power (Ref. 24-41-00).

3. Relamping

A. Aft Service Center Fluorescent Light, Lower Assembly

(1) On aft service center, verify that rocker switch for lower assembly is placed in off position.

(2) On lower fluorescent light fixture press both cover relase buttons and swing cover downward to open.

(3) Open lampholder at each end of fluorescent lamp and remove lamp.

(4) Install replacement fluorescent lamp and close lampholder at each end of lamp.

(5) Close cover and verify that cover release buttons lock into place.

(6) Turn on electrical power (Ref. 24-41-00).

(7) On aft service center, depress the lower fluorescent lights rocker switch alternately to the dim, bright, and off position and verify that the replacement lamp come on dimly, brightly, and goes out.

(8) Turn off electrical power (Ref. 24-41-00).

LUMINAIRE BALLAST ASSEMBLY - REMOVAL AND INSTALLATION

1. Referenced Procedure

R 24-00-00 Electrical Power - Maintenance Practices

2. Removal/Installation

A. Removal

(1) On aircraft 032, 033, galley right circuit breaker panel, zone 130, open and tag circuit breakers CABIN LIGHTING - LUMINAIRE - DISTRIBUTION - FWD (E11 and E12) and AFT (F11, F12, F13, F14).

(2) Release luminaire ceiling panel and passenger service module latches and swing down (Ref. Fig. 401).

CAUTION: PROPERLY COIL AND STORE THE HOSE WHEN PSM RACKS ARE CLOSED.

INSPECT OXYGEN MASK HOSES FOR POSSIBLE HEAT DAMAGE WHENEVER AN ADJACENT BALLAST FAILS OR AN OXYGEN GENERATOR IS INADVERTENTLY FIRED.

(3) Locate ballast on trough side above passenger service module.

(4) Remove luminaire terminal board cover, and disconnect and tag ballast wires from terminal board.

(5) Remove bolt, nut and washer securing wire clamp, and carefully pull wire cable through grommet.

(6) Remove screws securing luminaire ballast assembly. Remove ballast assembly.

B. Installation

(1) Verify circuit breakers opened in Step 2A(1) are open and tagged.

(2) Position luminaire ballast assembly on mounting brackets in overhead trough area and secure with screws (Ref. Fig. 401).

(3) Carefully route ballast assembly wire cable through grommet and connect leads to luminaire terminal board. Remove lead tags.

(4) Using washer, bolt, nut and clamp, secure cable to trough structure.

(5) Install terminal board cover.

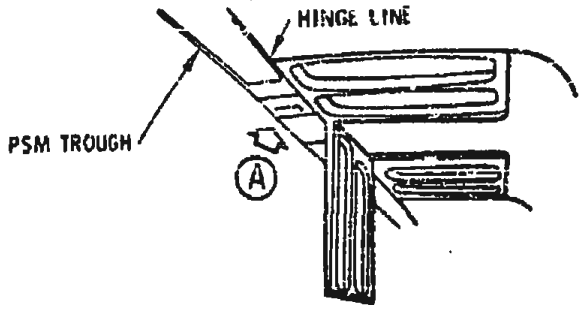
(6) Swing luminaire ceiling panel and passenger service module up into close position and secure latches.

(7) Remove tags and close circuit breakers opened in Step 2A(1).

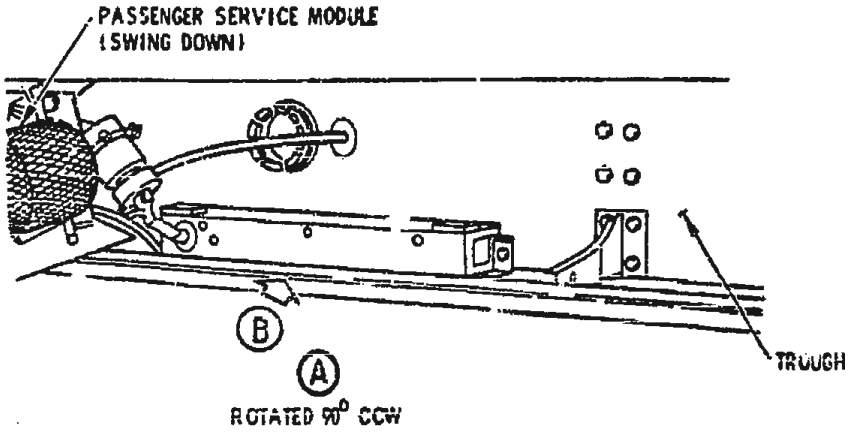
R (8) Turn on electrical power (Ref. 24-00-00).

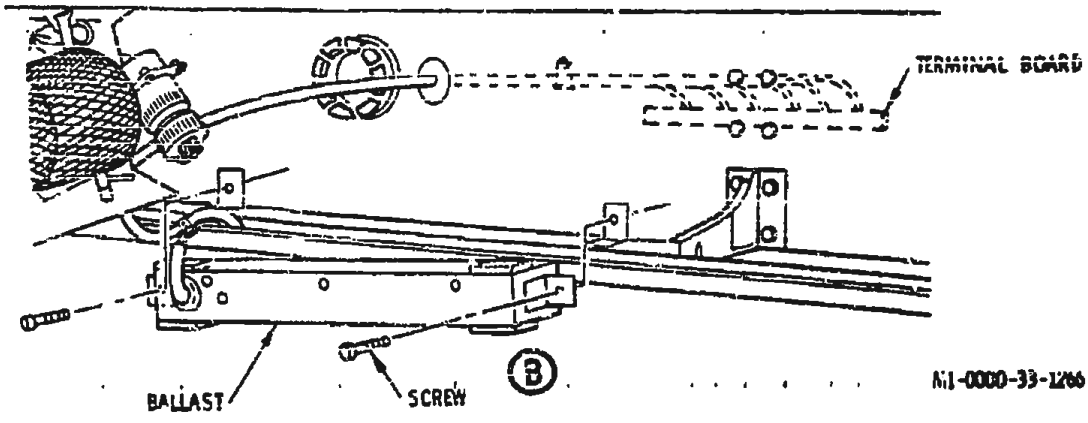
(9) Turn on ceiling lights to test lamps and ballast assembly. Turn off lights after test.

R (10) Turn off electrical power (Ref. 24-00-00).



CABIN CEILING LOOKING UP





R Luminaire Ballast Assembly - Removal and Installation
R Figure 401

R EFFECTIVITY: 032, 033
R
001B

WINDOW VALANCE BALLAST - REMOVAL AND INSTALLATION

1. Referenced Procedures

20-24-04 Electric Bonding and Grounding Connections

R 24-00-00 Electrical Power - Maintenance Practices

2. Equipment and Materials

Gloves, disposable, MIL-G-36281, or equivalent

Goggles; chem. protective, eye

Cleaner, CB-A916, or equivalent

Towel, paper, NPS-358-020-002, or equivalent

Ohmmeter, Shallcross 670A, or equivalent

3. Removal/Installation

A. Removal

(1) On galley left circuit breaker panel, zone 130, open and tag circuit breakers: CABIN LIGHTING - VALANCE CONTROL (K21), LIGHTING - VALANCE - FWD (F13), LH (F14) and RH (F15).

(2) Release window valance latches to gain access to ballast assembly (Ref. Fig. 401). (3) On valance light assemblies 3321A420, 421, 430 and 450; remove screws, nuts and clamp securing dummy load module to ballast assembly.

(4) Remove ballast assembly terminal board cover.

(5) Disconnect and tag wires from terminal board.

(6) Disconnect and tag lamp compensator (resistor) leads from terminal board. Remove compensator. Bag and tag compensator for reinstallation.

(7) Remove nuts securing ballast assembly to mounting flange. Remove ballast assembly.

B. Installation

(1) Verify circuit breakers opened in Step 2A(1) are open and tagged.

WARNING: USE CLEANER IN WELL-VENTILATED AREA. DO NOT TAKE INTERNALLY, TOXIC AND HARMFUL IF SWALLOWED. DO NOT INHALE VAPOR AND AVOID CONTACT WITH SKIN AND EYES. PROLONGED EXPOSURE MAY RESULT IN LUNG, SKIN AND/OR EYE IRRITATION.

(2) Perform faying surface electric bonding:

(a) Wearing gloves and eye goggles, clean ballast assembly and light assembly mounting flange faying surfaces with paper towel dampened in cleaner. While still wet, wipe faying surfaces dry with clean dry paper towel. Ensure faying surfaces are thoroughly dried before assembly (Ref. 20-24-04).

(3) Position ballast assembly on mounting flange and secure with nuts (Ref. Fig. 401).

(4) Using low-range ohmmeter, measure resistance across faying surfaces. Maximum resistance of 0.0025 ohms allowed for proper electric bonding (Ref. 20-24-04).

(5) Unless previously accomplished, remove terminal board cover.

(6) Connect lamp compensator (resistor) to terminal board connections. Remove tags from wires.

(7) Connect light assembly wires to terminal board. Remove tags from wires.

(8) On valance light assemblies 3321A420, 421, 430 and 450; install dummy load module on bracket using clamp, screws and nuts. Connect module wires to terminal board, and remove tags from wires.

(9) Install terminal board cover.

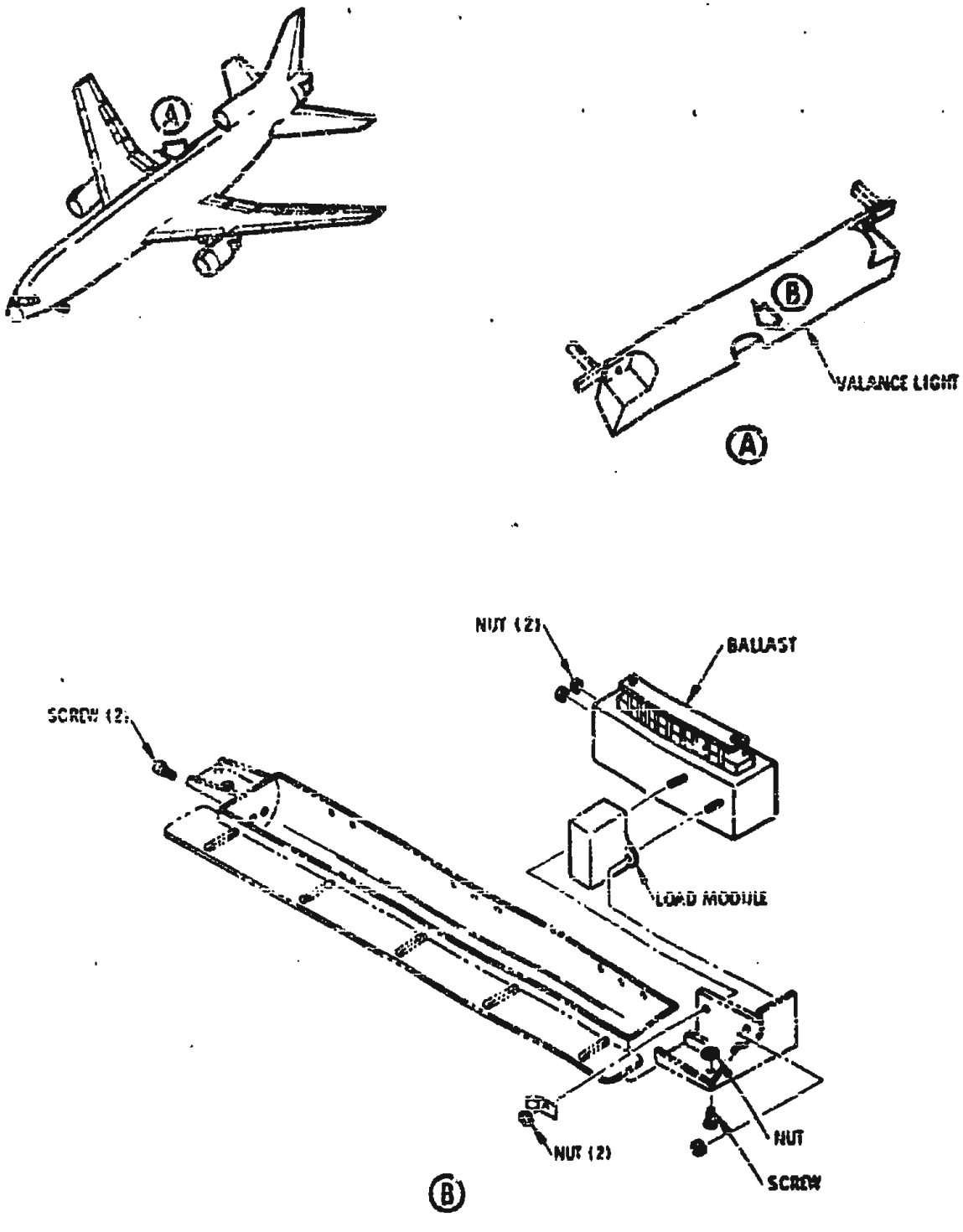
(10) Remove tags and close circuit breakers opened in Step 3A(1).

R (11) Turn on electrical power (Ref. 24-00-00).

(12) Turn on window valance lights to test lamps and ballast. Turn lights off after test.

R (13) Turn off electrical power (Ref. 24-00-00).

(14) Close and secure window valance panel.



Window Valance Ballast - Removal and Installation
Figure 401

R CROSS-AISLE BALLAST - REMOVAL AND INSTALLATION

R 1. Referenced Procedure

R 24-41-00 External Power/Ground Service System - Maintenance
R Practices

R 2. Removal/Installation

R A. Removal

R (1) On galley left circuit breaker panel, zone 130, open
R and tag circuit breaker PASS SVCE BUSS 1L, LIGHTING
R -CROSS AISLE.

R (2) Release ceiling panel latches, FS905, to gain access to
R cross-aisle ballasts on overhead electrical equipment
R rack (Ref. Fig. 401).

R (3) Remove terminal board cover, and disconnect and tag
R wires from terminal board.

R (4) Remove screws securing ballast to equipment rack.

R B. Installation

R (1) Verify circuit breaker opened in Step A(1) is open and
R tagged.

R (2) Position ballast on overhead equipment rack and secure
R with screws (Ref. Fig. 401).

R (3) Remove terminal board cover.

R (4) Connect wires to wire board and remove wire tags.
R Install terminal board cover.

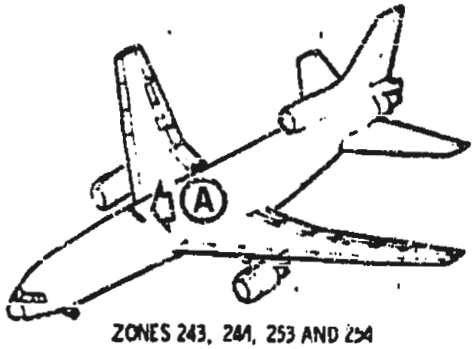
R (5) Remove tags and close circuit breaker opened in Step
R 2A(1).

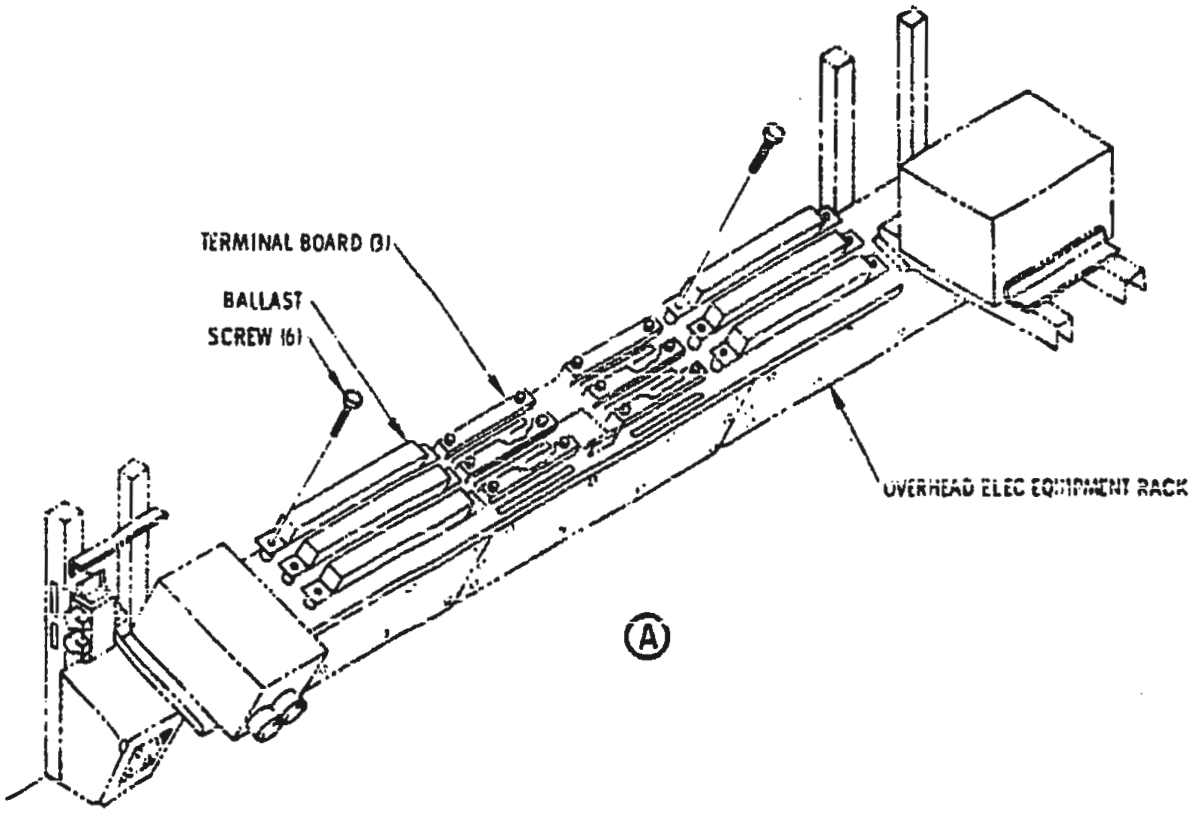
R (6) Turn on electrical power (Ref. 24-41-00).

R (7) Turn on cross-aisle lights to test lamps and ballast.
R Turn lights off after test.

R (8) Turn off electrical power (Ref. 24-41-00).

R (9) Close and latch ceiling panel.





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R R Cross-aisle Ballast - Removal and Installation
Figure 401

CR CABIN ATTENDANT WORK AND AUXILIARY BAR LIGHTING - DESCRIPTION AND CR OPERATION

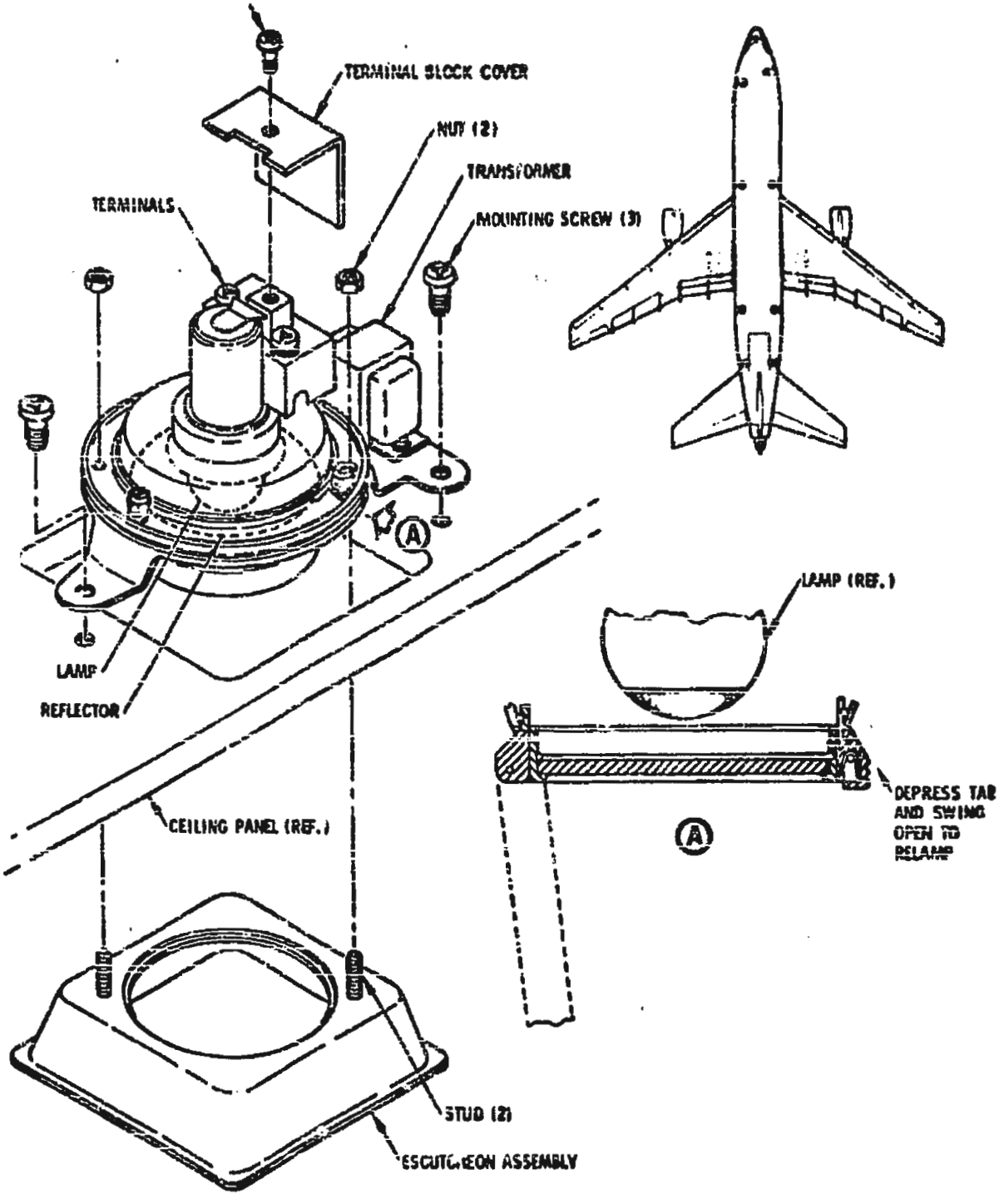
1. General

CR A. Cabin Attendant Work Lights

A work light is installed in the ceiling above each cabin attendant seat. Each light fixture (Ref. Fig. 1) incorporates an integral 115/28V ac stepdown transformer and a single incandescent lamp. The light is controlled by a switchlight on the attendant seat panel (Ref. Fig. 2).

CR B. Auxiliary Bar Lights

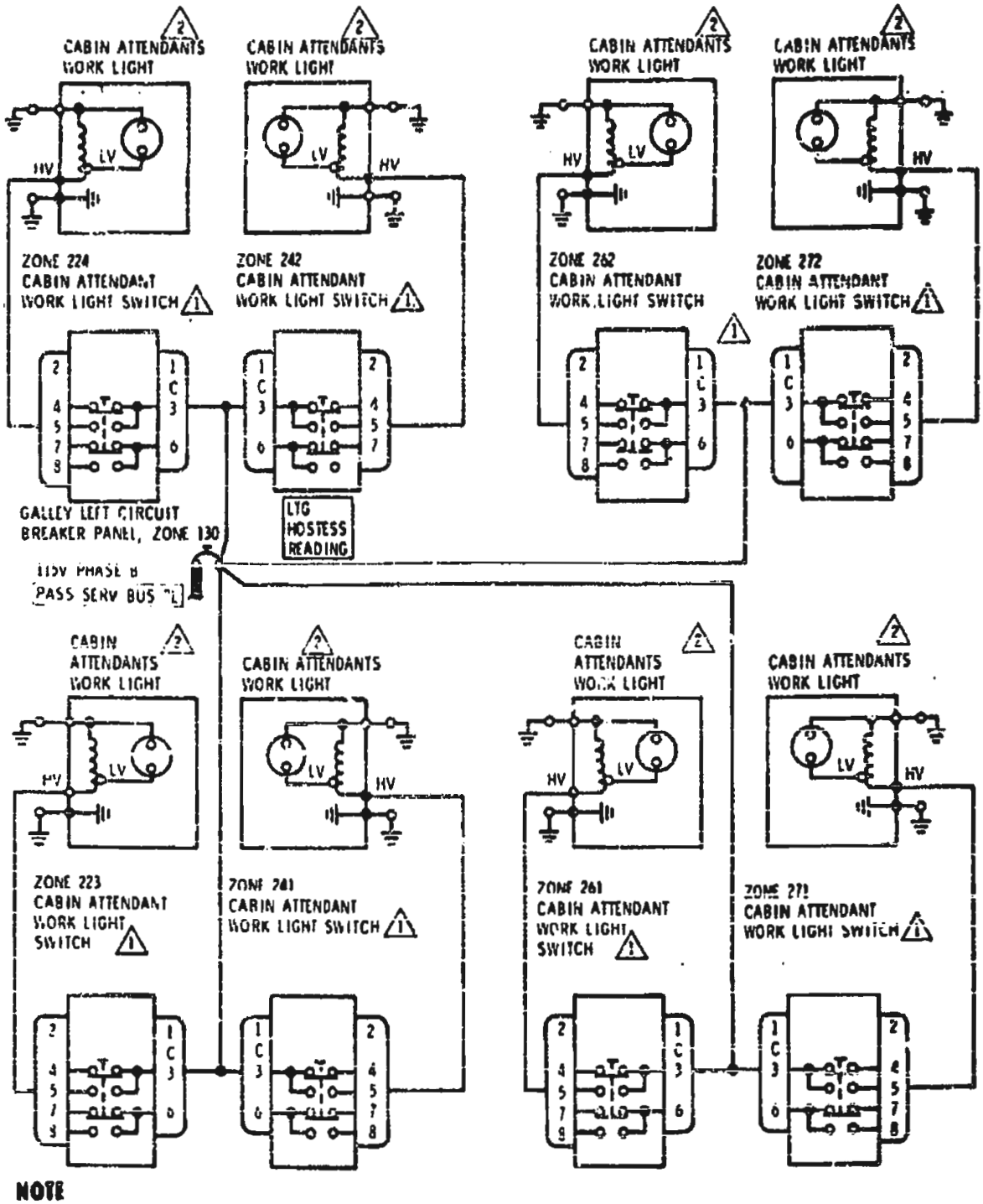
CR Two work lights are installed in the passenger service
CR module above each auxiliary bar. Each light system consists
CR of a 115/28 VAC stepdown transformer and a single
CR incandescent lamp. The light is controlled by a switch on
CR the passenger service module adjacent to the light assembly
CR (Ref. Fig. 3). The light assembly, stepdown transformer and
CR control switches are all located in the passenger service
CR module.



M1-0101-33-009

R
R

Cabin Attendant Work Light
Figure 1

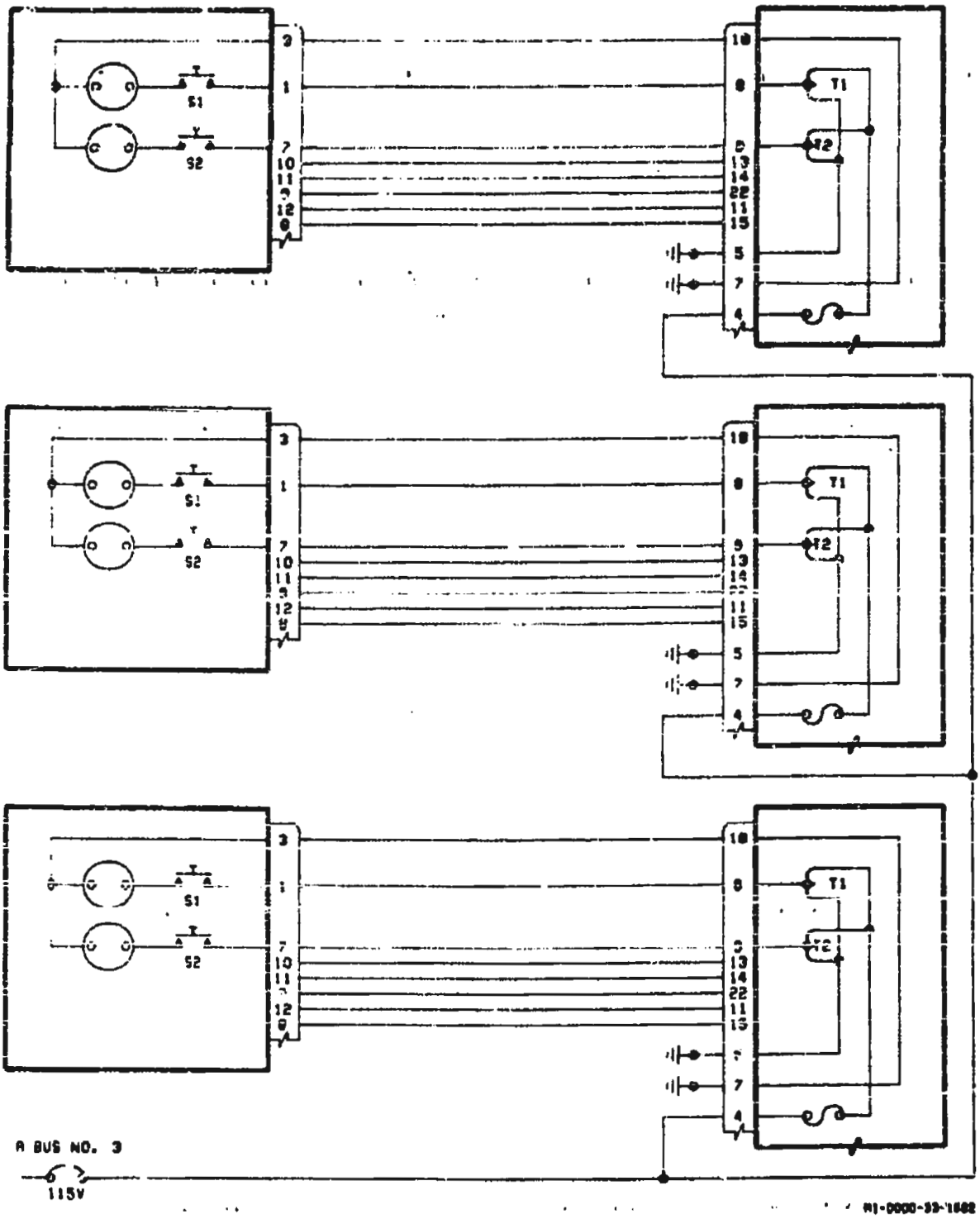

CABIN ATTENDANTS WORK LIGHT
HV
LV
ZONE 224 CABIN ATTENDANT WORK LIGHT SWITCH
ZONE 242 CABIN ATTENDANT WORK LIGHT SWITCH
ZONE 262 CABIN ATTENDANT WORK LIGHT SWITCH
ZONE 272 CABIN ATTENDANT WORK LIGHT SWITCH
GALLEY LEFT CIRCUIT BREAKER PANEL, ZONE 130
LTG HOSTESS READING
115V PHASE B PASS SERV BUS
ZONE 223 CABIN ATTENDANT WORK LIGHT SWITCH
ZONE 241 CABIN ATTENDANT WORK LIGHT SWITCH
ZONE 261 CABIN ATTENDANT WORK LIGHT SWITCH
ZONE 271 CABIN ATTENDANT WORK LIGHT SWITCH

NOTE

1. MOUNTED ON CABIN ATTENDANTS SEAT SWITCH PANEL
2. MOUNTED IN CEILING PANEL ABOVE CABIN ATTENDANTS SEAT

HH 6353
EM1-0100 33-539

Cabin Attendant Work Light Schematic
Figure 2



CR
CR
Auxiliary Bar Lights Schematic
Figure 3

R EFFECTIVITY: ALL
R
0018

CABIN ATTENDANTS WORK LIGHTING - ADJUSTMENT AND TEST

1. Equipment and Materials

Aiming and Shutoff Wand, Wemac PN 2727, or equivalent

2. Referenced Procedure

24-41-00 External Power/Ground Service Systems - Maintenance Practices

3. Adjustment/Test

A. Operational Test

(1) Turn on electrical power (Ref. 24-00-00).

(2) On galley left circuit breaker panel, zone 130, verify that circuit breaker LTG - HOSTESS READING (10F) is closed.

(3) On cabin attendants seat switch panel, operate the WORK light switch to the on position. Verify that the cabin attendants work light comes on.

(4) Operate the WORK light switch to the off position.

(5) Turn off electrical power (Ref. 24-00-00).

B. Adjustment

(1) Turn on electrical power (Ref. 24-00-00).

(2) On galley left circuit breaker panel, zone 130, verify that circuit breaker LTG - HOSTESS READING 10F is closed.

(3) On cabin attendants seat switch panel, operate the WORK light switch to the on position.

(4) Using the aiming and shutoff wand, aim the light so the beam falls on the central forward section of the seat.

NOTE: Extend the wand to a convenient working length.

(5) Operate the WORK light switch to the off position.

(6) Turn off electrical power (Ref. 24-00-00).

CABIN ATTENDANT WORK LIGHT - REMOVAL AND INSTALLATION

1. Referenced Procedure

R 24-00-00 Electrical Power - Maintenance Practices

2. Removal/Installation

A. Removal

(1) On galley left circuit breaker panel, zone 130, open and tag circuit breaker PASS SERV BUS 2L - LTG - HOSTESS READING (10F).

(2) Release fasteners and lower applicable ceiling panel.

(3) Remove terminal block cover (Ref. Fig. 401).

(4) Remove and tag wires.

(5) Remove escutcheon.

(6) Remove light-mounting screws and remove light.

B. Installation

(1) Verify that circuit breaker opened in Step 2A(1) is open and tagged.

(2) Position work light on ceiling panel and secure with screws (Ref. Fig. 401).

(3) Install escutcheon.

(4) Remove tags and connect wires to terminal block.

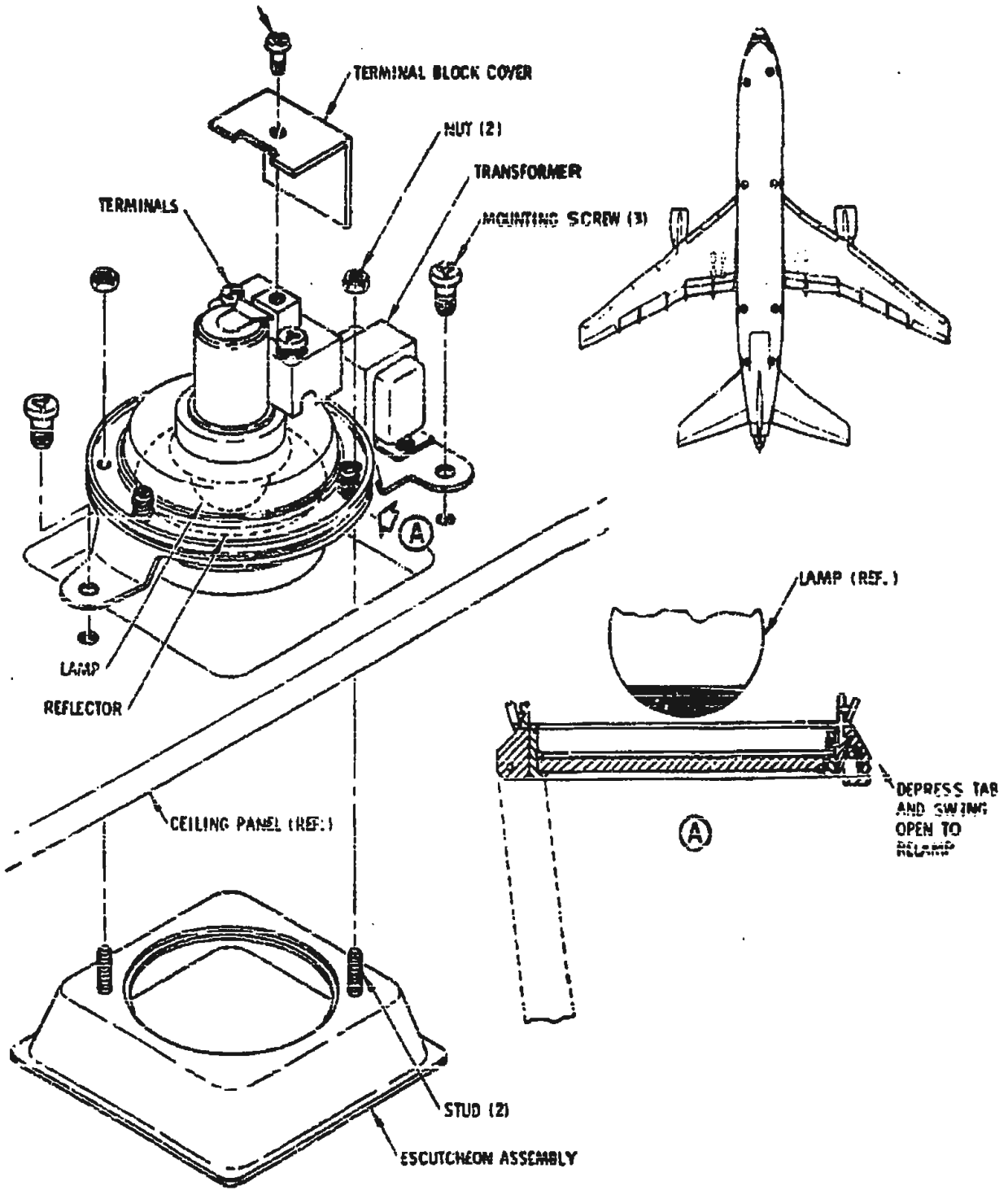
(5) Install terminal block cover.

(6) Replace ceiling panel.

(7) Remove tag and close circuit breaker opened in Step 2A(1).

3. Relamping

A. Cabin Attendant Work Light



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R
R Cabin Attendant Work Light - Removal and Installation
Figure 401

(1) On cabin attendant seat panel, verify that light is turned off.

(2) Open light bezel (Ref. Fig. 401).

(3) Remove faulty lamp.

(4) Install replacement lamp.

R (5) Turn on electrical power (Ref. 24-00-00).

(6) Turn on cabin attendant work light to test lamp. Turn light off after test.

R (7) Turn off electrical power (Ref. 24-00-00).

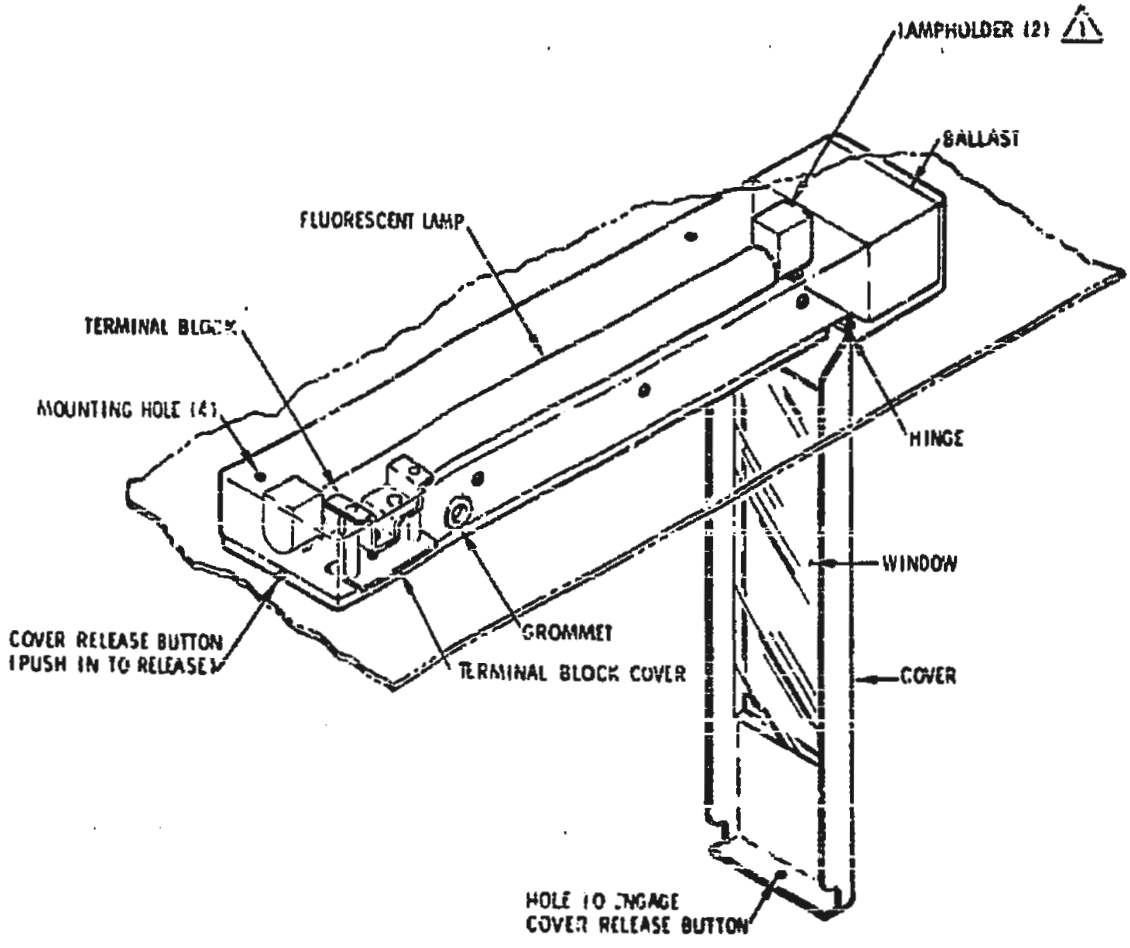
(8) Close light bezel.

COAT CLOSET LIGHTING - DESCRIPTION AND OPERATION

1. General

Coat closet lighting utilizes fluorescent lights (Ref. Fig. 1 and Fig. 2).

R On aircraft 001-006,
R an incandescent light is provided in the magazine closet above
R the forward coat closet.



NOTE

⚠1 RELEASE LAMPHOLDERS TO RELAMP

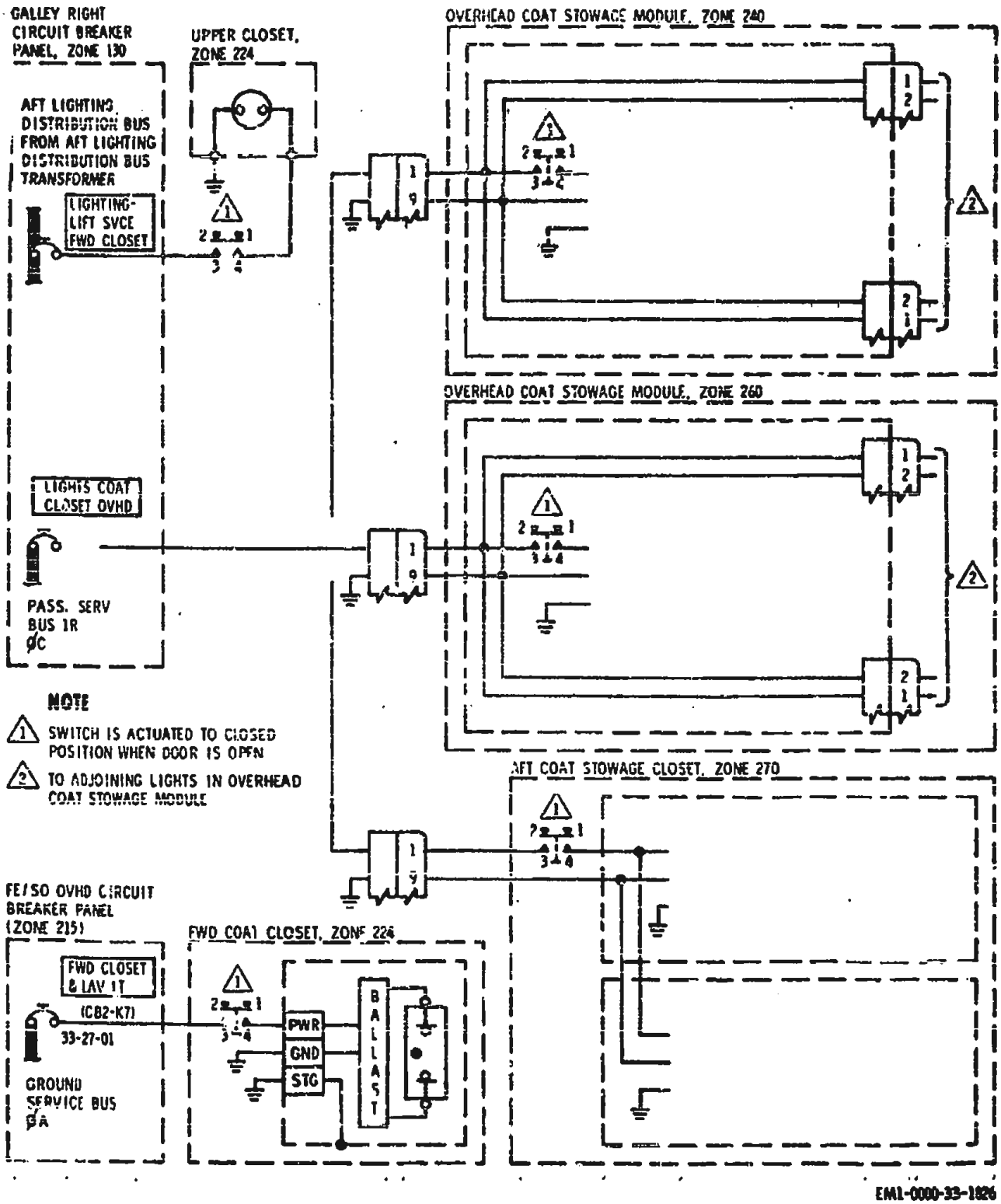
M1-0101-33-060

R
R

Coat Closet Light
Figure 1

EFFECTIVITY: ALL

044R


GALLEY RIGHT CIRCUIT BREAKER PANEL, ZONE 130
UPPER CLOSET, ZONE 224
AFT LIGHTING DISTRIBUTION BUS FROM AFT LIGHTING DISTRIBUTION BUS TRANSFORMER
LIGHTING-LIFT SVCE FWD CLOSET
OVERHEAD COAT STOWAGE MODULE, ZONE 240
OVERHEAD COAT STOWAGE MODULE, ZONE 260
LIGHTS COAT CLOSET OVHD
PASS. SERV BUS 1R
NOTE
1 SWITCH IS ACTUATED TO CLOSED POSITION WHEN DOOR IS OPEN
2 TO ADJOINING LIGHTS IN OVERHEAD COAT STOWAGE MODULE
AFT COAT STOWAGE CLOSET, ZONE 270
FE/SO OVHD CIRCUIT BREAKER PANEL (ZONE 215)
FWD COAT CLOSET, ZONE 224
FWD CLOSET & LAV LT
(CB2-K7)
33-27-01
GROUND SERVICE BUS
PWR
GND
STG
BALLAST
EM1-0000-33-1826

CR
CR

Coat Closet Lighting Schematic
Figure 2

EFFECTIVITY: ALL

001B

COAT COMPARTMENT LIGHTING - ADJUSTMENT AND TEST

1. Referenced Procedure

24-41-00 External Power/Ground Service Systems - Maintenance Practices

2. Adjustment/Test

A. Operational Test

(1) Turn on electrical power (Ref. 24-41-00).

(2) On Flight Engineer/Second Officers overhead circuit panel CB2, zone 215, verify that circuit breaker GROUND SERVICE BUS - FWD CLOSET & LAV LT (K7) is closed.

On aircraft 001-006,
on galley right circuit breaker panel, zone 130, verify that the following circuit breakers are closed:

LIGHTING - LIFT SVCE FWD CLOSET (19B)

CR (3) Open and close, in turn, the lower coat closet doors
CR and magazine closet door; verify that the light comes
CR on when the associated door is opened and goes out as
CR the door closes.

(4) Turn off electrical power (Ref. 24-41-00).

COAT CLOSET LIGHTS - REMOVAL AND INSTALLATION

1. Referenced Procedure

R 24-00-00 Electrical Power - Maintenance Practices

2. Removal/Installation

A. Removal

(1) Forward Coat Closet:

On Flight Engineer/Second Officers overhead circuit breaker panel CB2, zone 215, open and tag circuit breaker GROUND SERVICE BUS - FWD CLOSET & LAV LT (K7).

On galley right circuit breaker panel, zone 130, open and tag circuit breaker PASS SERV BUS IR - LIGHTS - COAT CLOSET - OVHD (G14).

(2) Depress light cover release button and swing cover down (Ref. Fig. 401).

(3) Release lampholders and remove lamp.

(4) Remove terminal block cover.

(5) Disconnect and tag wires on terminal block. Withdraw wires through grommet in light housing.

(6) Remove mounting screws and remove light.

B. Installation

(1) Verify that circuit breaker opened in Step 2A(1) is open and tagged.

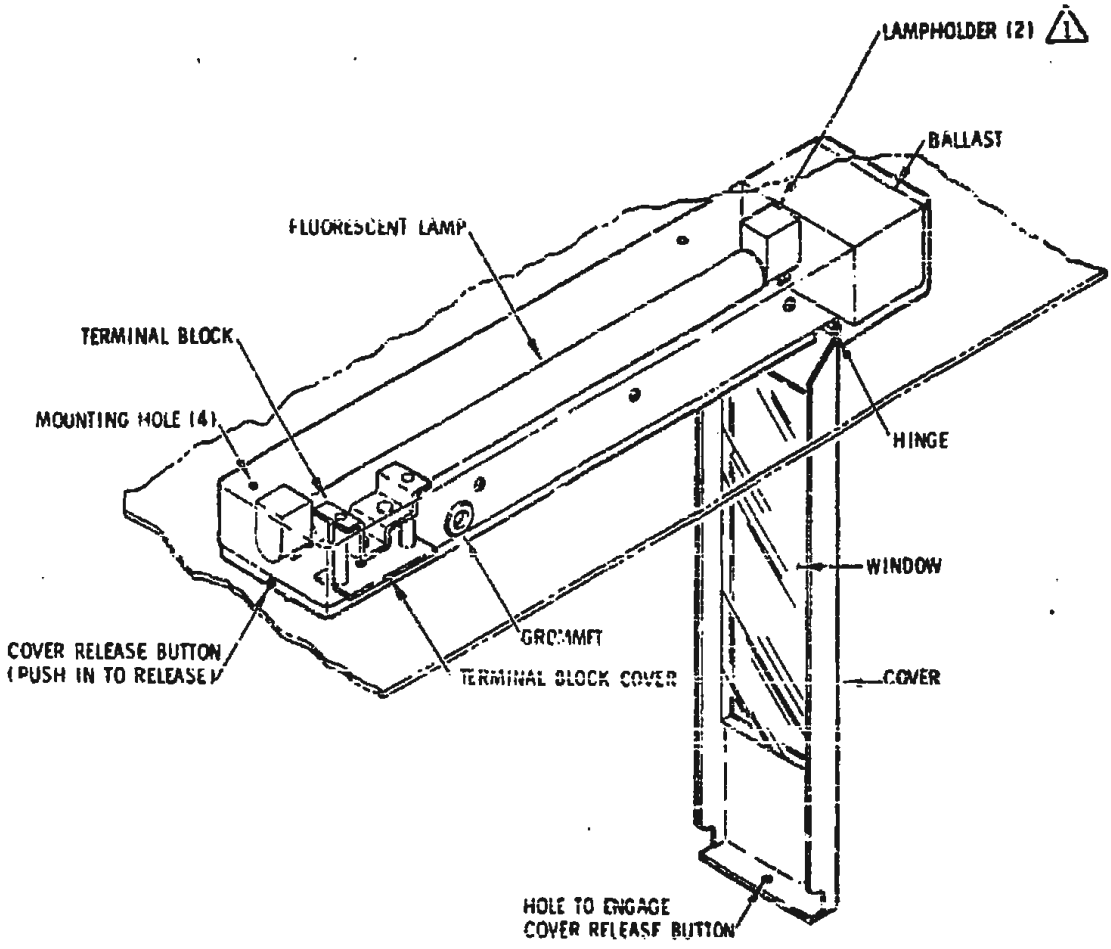
(2) Position light and secure with mounting screws.

(3) Insert wires through grommet and connect to terminal block.

(4) Install terminal block cover.

(5) Install lamp and secure with lampholders.

(6) Close cover.



NOTE

1 RELEASE LAMPHOLDERS TO RELAMP

M1-0101-33-040

R
R

Coat Closet Light - Removal and Installation
Figure 401

(7) Close circuit breakers opened in Step 2A(1) with closet door open.

(8) Verify light comes on.

(9) Actuate closet switch to off position and verify light goes off.

(10) Close closet door.

R (11) Turn off electrical power (Ref. 24-00-00).

3. Relamping

A. Coat Closet Light

(1) Turn light off by actuating switch or by opening circuit breaker [Ref. Step 2A(1)].

(2) Depress light cover release button and swing cover down (Ref. Fig. 401).

(3) Release lampholders and remove faulty lamp.

(4) Install replacement lamp and secure with lampholders.

R (5) Turn on electrical power (Ref. 24-00-00).

(6) Turn on closet light to test lamp. Turn light off after test.

R (7) Turn off electrical power (Ref. 24-00-00).

(8) Close light cover.

MAGAZINE CLOSET INCANDESCENT LIGHT - REMOVAL AND INSTALLATION

1. Referenced Procedure

24-41-00 External Power/Ground Service System - Maintenance Practices

2. Removal/Installation

A. Removal

(1) On galley right circuit breaker panel, zone 130, open and tag circuit breaker LIGHTING - LIFT SVCE FWD CLOSET.

(2) Push lens up slightly and turn CCW to remove (Ref. Fig. 401).

(3) Remove mounting screws and pull light fixture down from ceiling. Tilt light fixture slightly to allow lamp socket to pass through ceiling opening.

(4) Remove insulating boot, then tag and remove wires from terminals of light fixture.

B. Installation

(1) Verify that circuit breaker opened in Step 2A(1) is open and tagged.

(2) Connect wires to terminals of light fixture and remove tags. Install insulating boot.

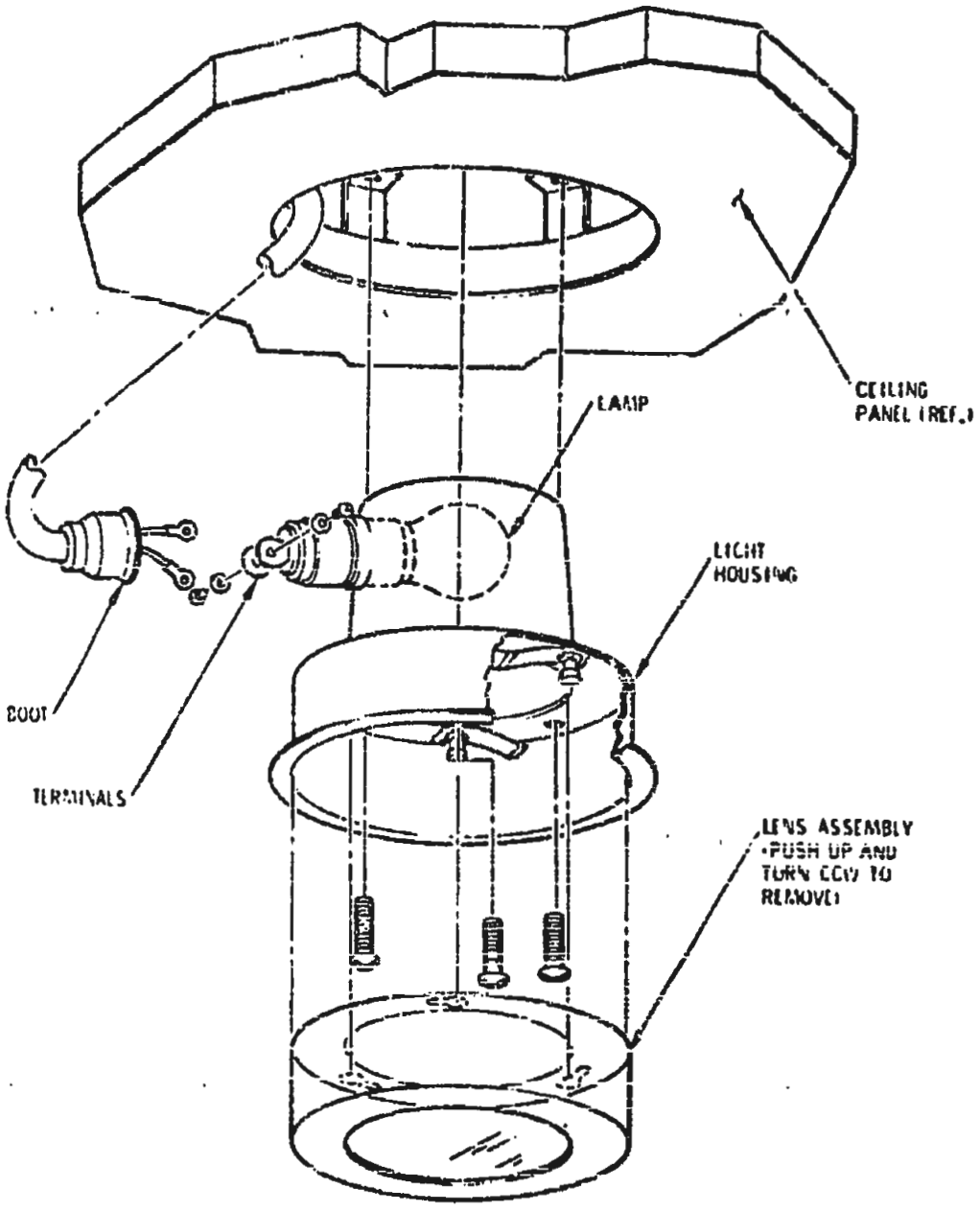
(3) Tilt light fixture to allow lamp socket to pass through ceiling opening, then insert light fixture into ceiling opening.

(4) Align mounting holes of light fixture with nuts of mounting brackets. Secure light fixture with screws.

(5) Replace lens. Push lens up slightly and turn CW to secure.

(6) Remove tag and close circuit breaker opened in Step 2A(1).

(7) Turn on electrical power (Ref. 24-41-00).



MH 9084
MH-0100-33-079

Magazine Closet Light - Removal and Installation
Figure 401

(8) Open magazine closet door and verify that light comes on. Close magazine closet door.

(9) Turn off electrical power (Ref. 24-41-00).

3. Relamping

A. Magazine Closet Light

(1) Turn light off by actuating switch or by opening circuit breaker [Ref. Step 2A(1)].

(2) Push lens up slightly and turn CCW to remove (Ref. Fig. 401).

(3) Press lamp in and turn CCW to remove.

(4) Insert replacement lamp, press in and turn CW to secure.

(5) Turn on electrical power (Ref. 24-41-00).

(6) Turn on closet light to test lamp. Turn light off after test.

(7) Turn off electrical power (Ref. 24-41-00).

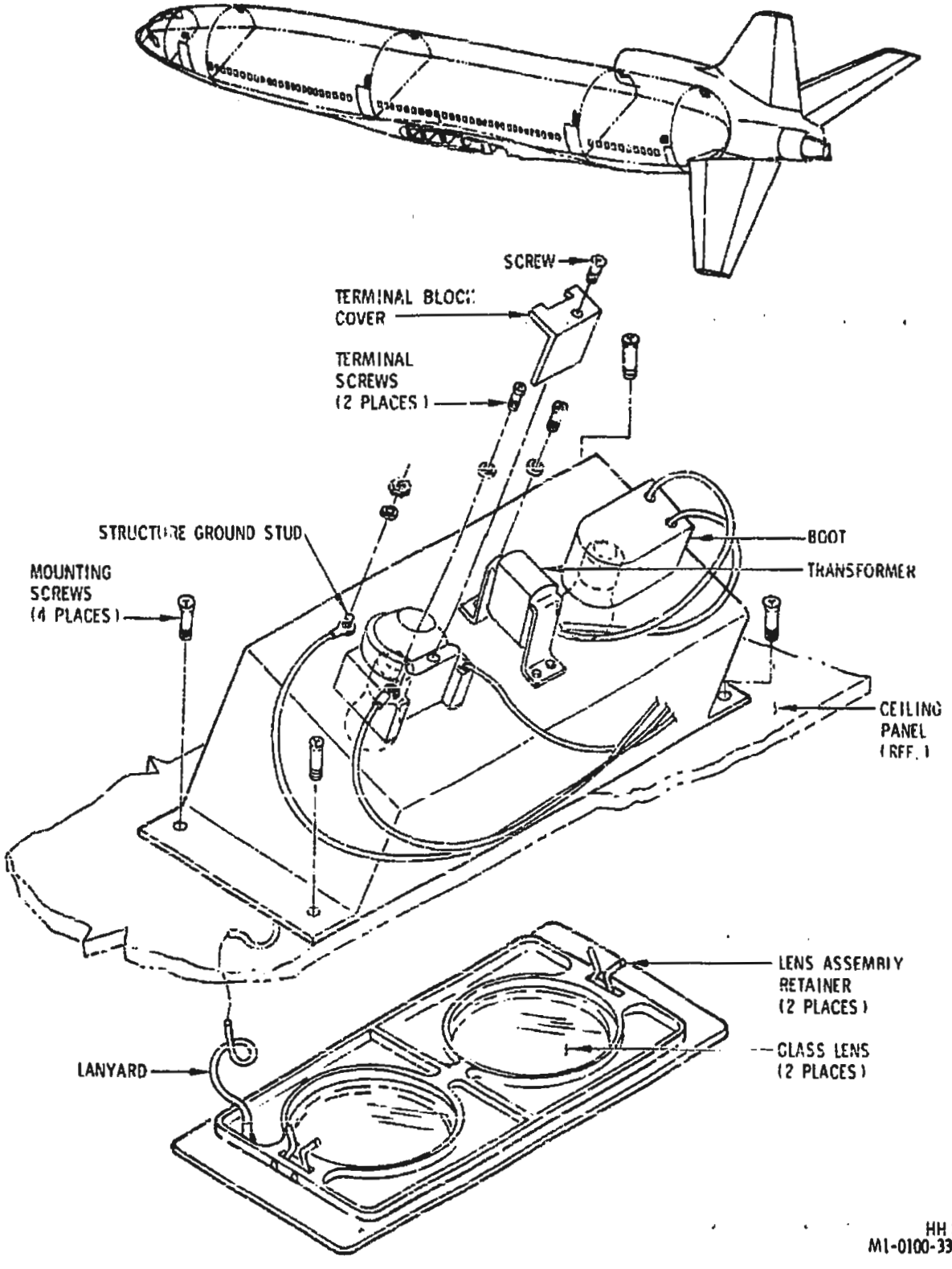
(8) Replace lens. Push lens up slightly and turn CW to secure.

ENTRANCE AREA LIGHTING - DESCRIPTION AND OPERATION

1. General

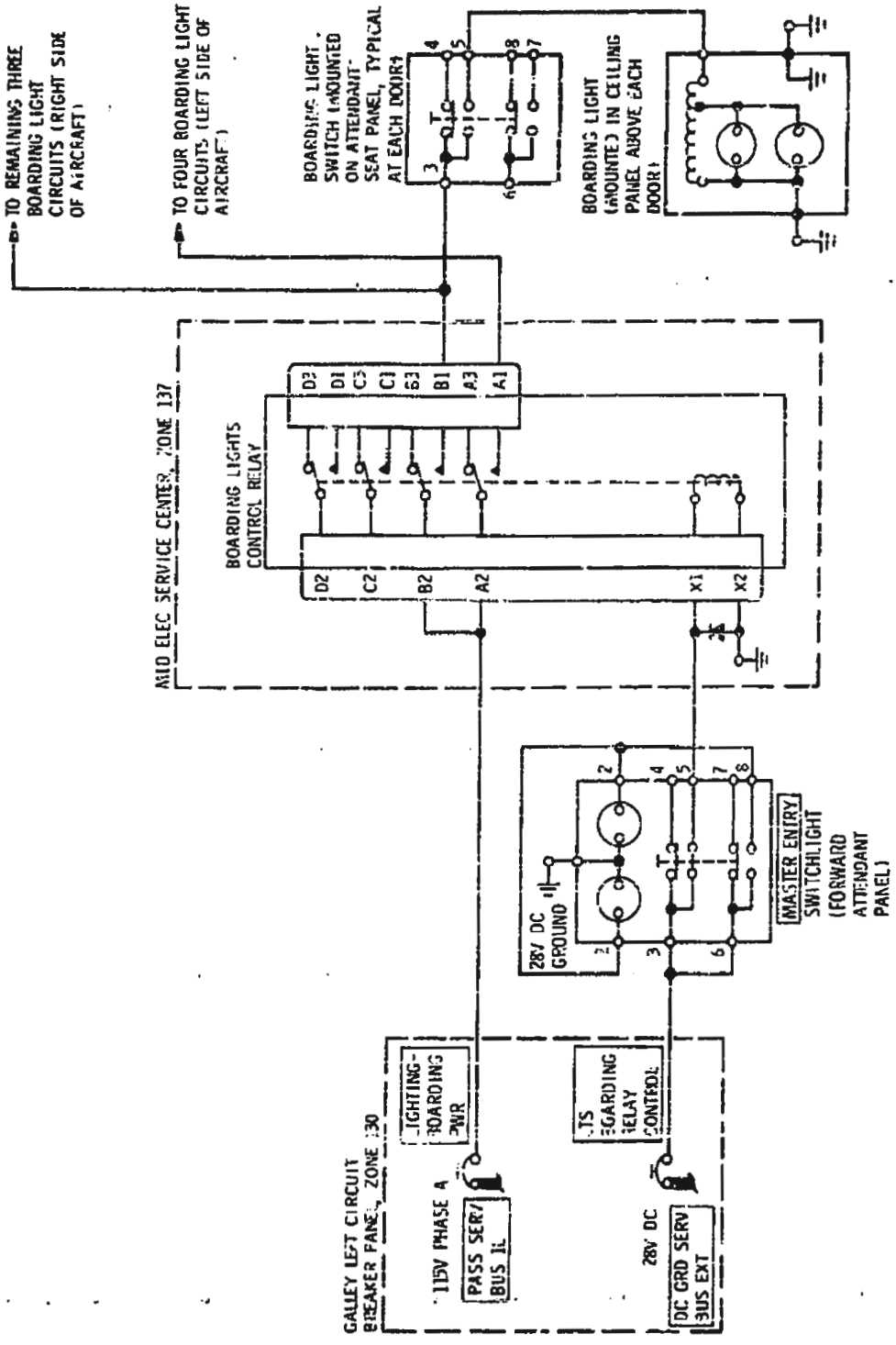
A boarding light is installed in the ceiling above each passenger entrance door (Ref. Fig. 1). Each light fixture incorporates two incandescent lamps and an integral 115/28V ac stepdown transformer.

A MASTER ENTRY switchlight located on the forward cabin attendants panel energizes the boarding light control relay (Ref. Fig. 2). The individual lights are then controlled by a switchlight on the adjacent cabin attendants seat switch panel.



HH 8107
M1-0100-33-041

Boarding Lights
Figure 1


TO REMAINING THREE BOARDING LIGHT CIRCUITS (RIGHT SIDE OF AIRCRAFT)
TO FOUR BOARDING LIGHT CIRCUITS (LEFT SIDE OF AIRCRAFT)
BOARDING LIGHT SWITCH (MOUNTED ON ATTENDANT SEAT PANEL, TYPICAL AT EACH DOOR)
BOARDING LIGHT (MOUNTED IN CEILING PANEL ABOVE EACH DOOR)
MID ELEC SERVICE CENTER, ZONE 137
BOARDING LIGHTS CONTROL RELAY
D2 D1 C3 C1 B3 B1 A3 A1
D2 C2 B2 A2 X1 X2
28V DC GROUND
MASTER ENTRY SWITCHLIGHT (FORWARD ATTENDANT PANEL)
GALLEY LEFT CIRCUIT BREAKER PANEL, ZONE 130
LIGHTING-BOARDING PWR
BOARDING RELAY CONTROL
115V PHASE A
PASS SERV BUS 1L
28V DC
DC GRD SERV BUS EXT

Boarding Lights Schematic
Figure 2

ENTRANCE AREA LIGHTING - ADJUSTMENT AND TEST

1. Referenced Procedure

R 24-00-00 Electrical Power - Maintenance Practices

2. Adjustment/Test

A. Operational Test

R (1) Turn on electrical power (Ref. 24-00-00).

(2) On galley left circuit breaker panel, zone 130, verify that the following circuit breakers are closed:

R BOARDING RELAY CONTROL (A22)

R BOARDING PWR (E17)

(3) At the forward attendants panel, depress the MASTER ENTRY switchlight to the on position. Verify that the legend MASTER ENTRY is on. Leave the switchlight on.

(4) At each cabin attendant seat control panel, depress the ENTRY pushbutton switch on, off, then on again. Verify that the associated boarding lights go on, off, and on. Leave all boarding lights on.

(5) At the forward attendants panel, depress the MASTER ENTRY switchlight off and on and verify that the legend in the switchlight and all boarding lights go off and on together.

(6) Depress the switchlight to the off position.

R (7) Turn off electrical power (Ref. 24-00-00).

BOARDING LIGHTS - REMOVAL AND INSTALLATION

1. Referenced Procedure

R 24-00-00 Electrical Power - Maintenance Practices

2. Removal/Installation

A. Removal

(1) On galley left circuit breaker panel, zone 130, open and tag circuit breaker LIGHTING - BOARDING - PWR.

(2) Lower ceiling panel to obtain access to the boarding light fixture.

(3) Insert fingers into slot at each end of lens assembly and pull lens assembly away from light fixture. Allow lens assembly to hang by lanyard (Ref. Fig. 401).

(4) Remove terminal block cover. Tag and remove aircraft wiring to terminal block.

(5) Remove screws that secure light fixture to ceiling panel. Withdraw lens assembly through opening in ceiling panel and remove light fixture.

B. Installation

(1) Verify that circuit breaker opened in Step 2A(1) is open and tagged.

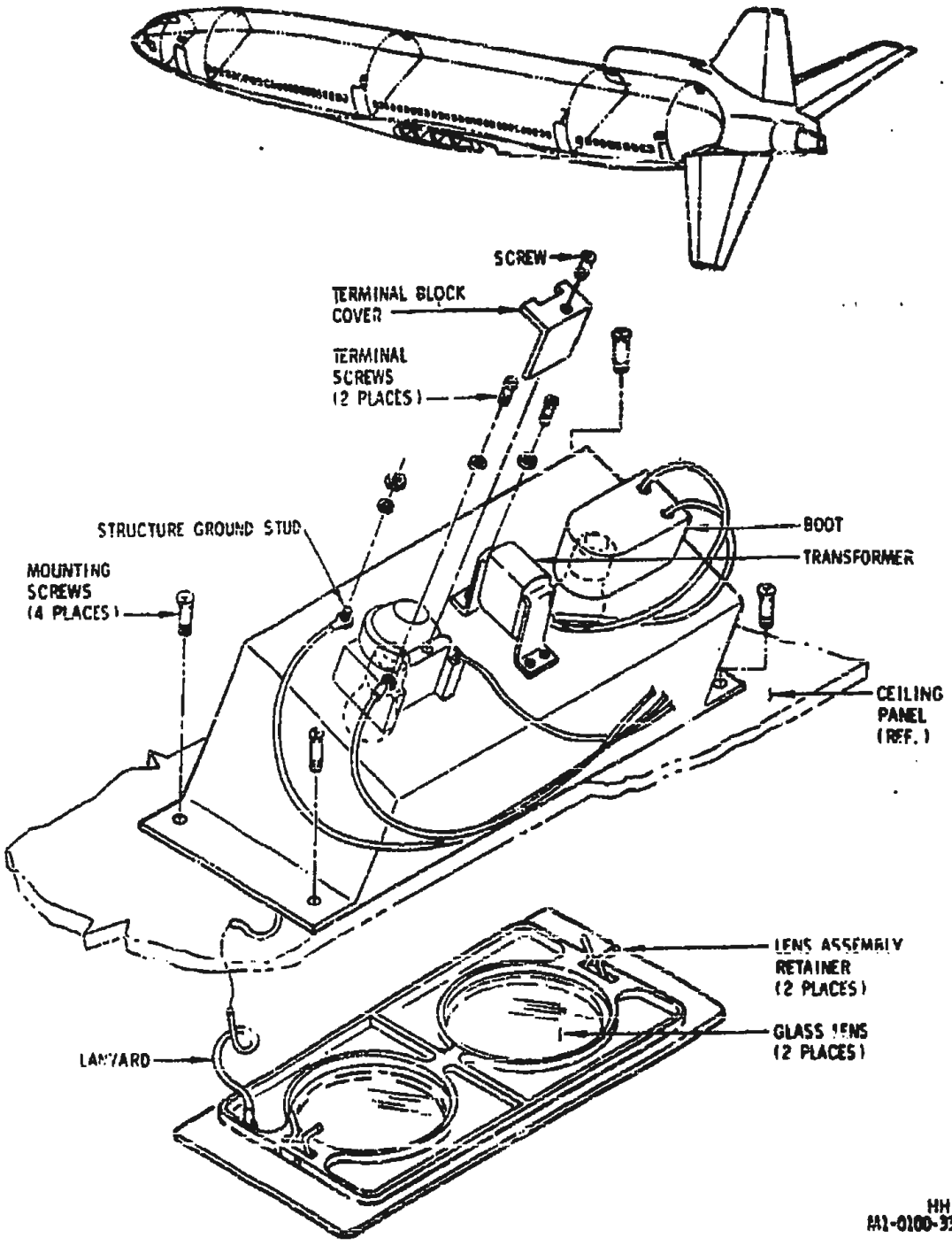
(2) Insert lens assembly through opening in ceiling panel. Position light assembly in place and secure with mounting screws.

(3) Connect aircraft wiring to terminals of terminal block and remove wire tags. Secure terminal block cover.

(4) Press lens assembly in place in light fixture.

(5) Secure ceiling panel.

(6) Remove tag and close circuit breaker opened in Step 2A(1).



Boarding Lights - Removal and Installation
Figure 401

EFFECTIVITY: ALL

0508

3. Relamping

A. Boarding Lights

(1) Verify that boarding light is turned off.

(2) Insert fingers into slot at each end of lens assembly and pull lens assembly away from light fixture. Allow lens assembly to hang by lanyard.

(3) Remove faulty lamp.

(4) Install replacement lamp.

R (5) Turn on electrical power (Ref. 24-00-00).

(6) Turn on boarding light to test lamp. Turn light off after test.

R (7) Turn off electrical power (Ref. 24-00-00.

(8) Press lens assembly in place in light fixture.

GALLEY AND LIFT LIGHTING - DESCRIPTION AND OPERATION

1. General

Galley and lift lighting includes the following lights:

Overhead lights (Ref. Fig. 1)

Work counter light (Ref. Fig. 2)

Loading door light (Ref. Fig. 3)

Lift lights (Ref. Figs. 4, 5, and 6)

Standby light

The galley overhead, work counter, and lift lights are controlled by either of two switchlights connected in parallel (Ref. Fig. 7). One switchlight is located on the galley upper lift control panel; the other is located adjacent to the galley loading door.

2. Galley Overhead and Work Counter Lights

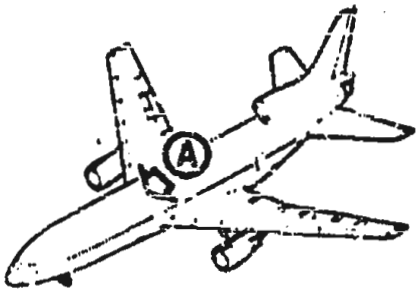
A. Description and Operation

R Six double-tube and three single-tube fluorescent lights
R (Ref. Fig. 1) are installed in the galley ceiling. One single-tube fluorescent light is installed over the galley work counter (Ref. Fig. 2). The lights are controlled by either of two galley switchlights (Ref. Fig. 7). The work counter light also incorporates an integral switch so it can be controlled separately when the galley overhead lights are on.

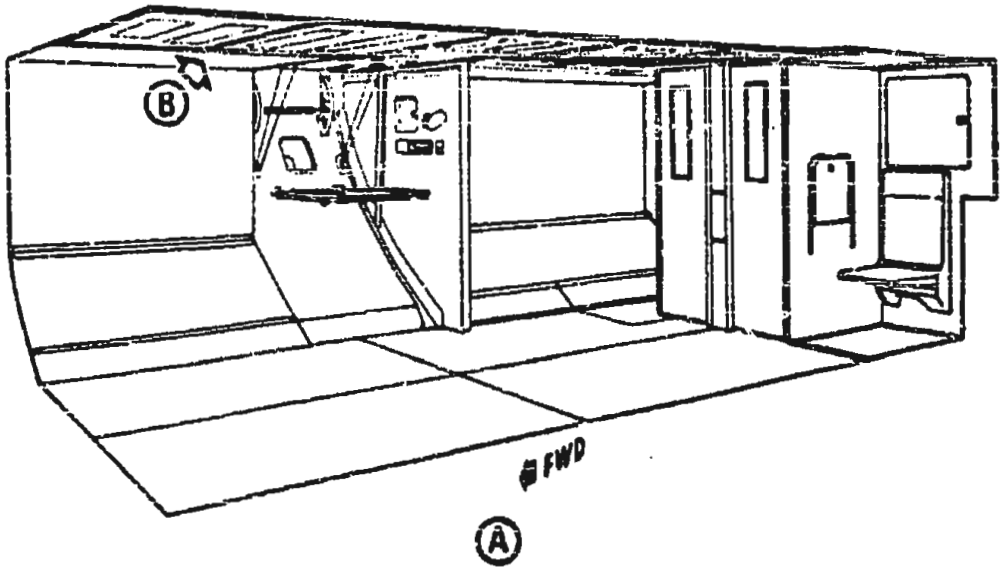
3. Galley Loading Door Light

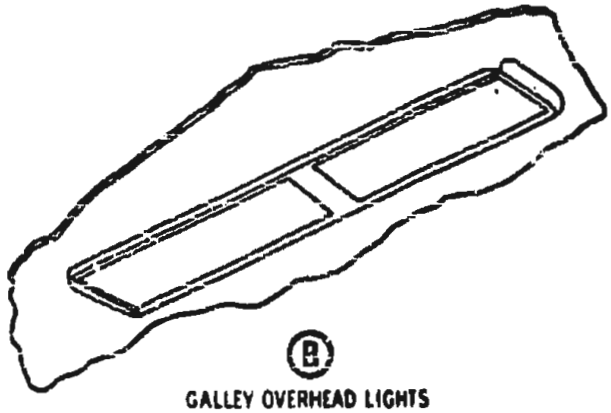
A. Description and Operation

The galley loading door light (Ref. Fig. 3) is a dual-purpose fixture incorporating a fluorescent lamp for normal lighting and an incandescent lamp for emergency lighting (Ref. 33-51-00). The fluorescent light is controlled by an integral switch (Ref. Fig. 7).



ZONE 130





GALLEY OVERHEAD LIGHTS

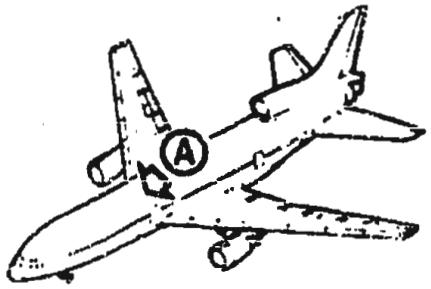
M1-0000-33-2007

R
R

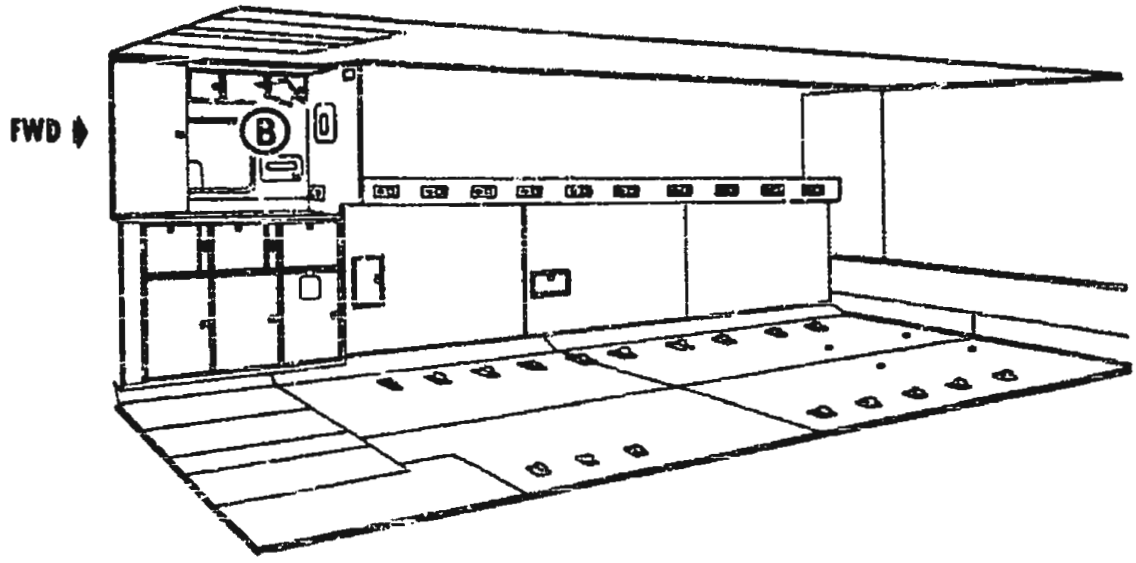
Galley Overhead Light
Figure 1

EFFECTIVITY: ALL

002B



ZONE 130



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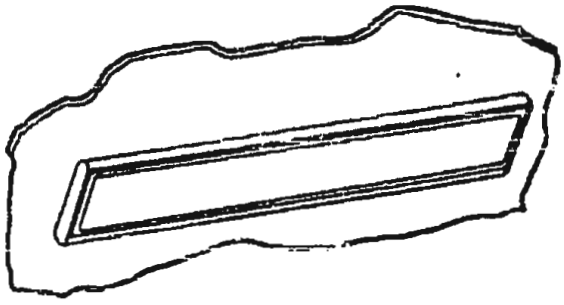


B

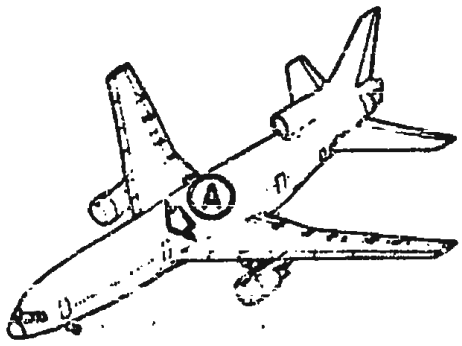
M1-0000-33-2008

R
R

Galley Work Counter Light
Figure 2

EFFECTIVITY: ALL

0028



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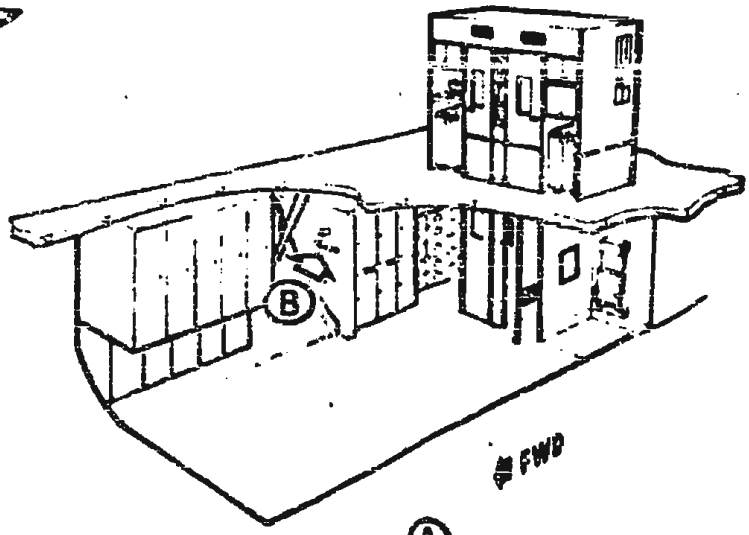

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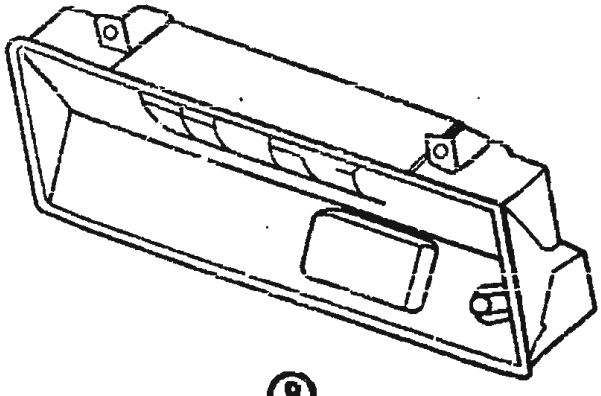

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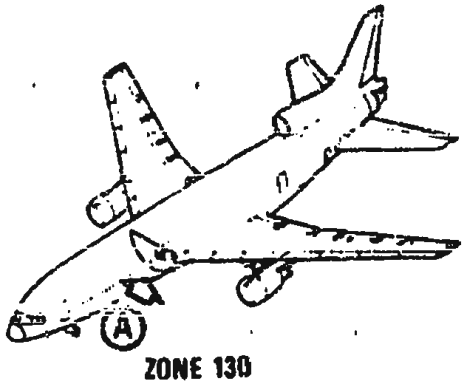
M1-0000-33-2009

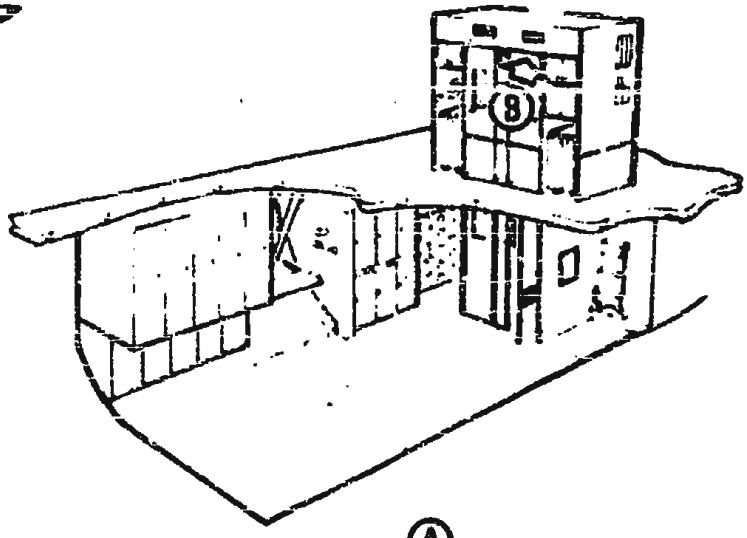
R Galley Loading Door Light
R Figure 3

EFFECTIVITY: ALL

0028



ZONE 130



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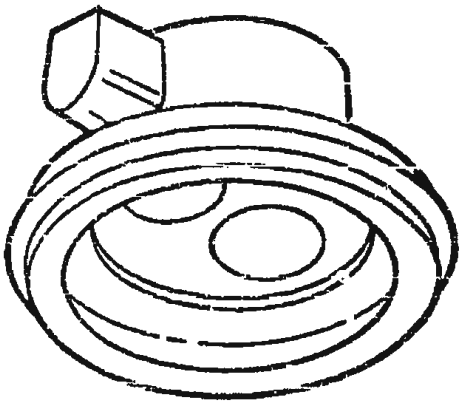

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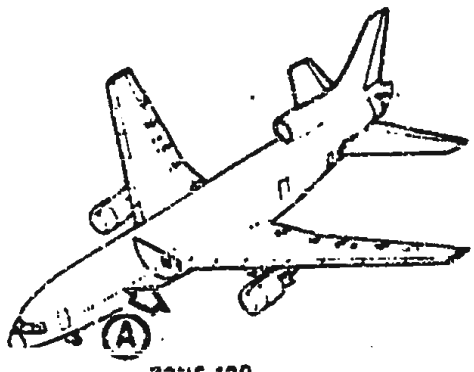
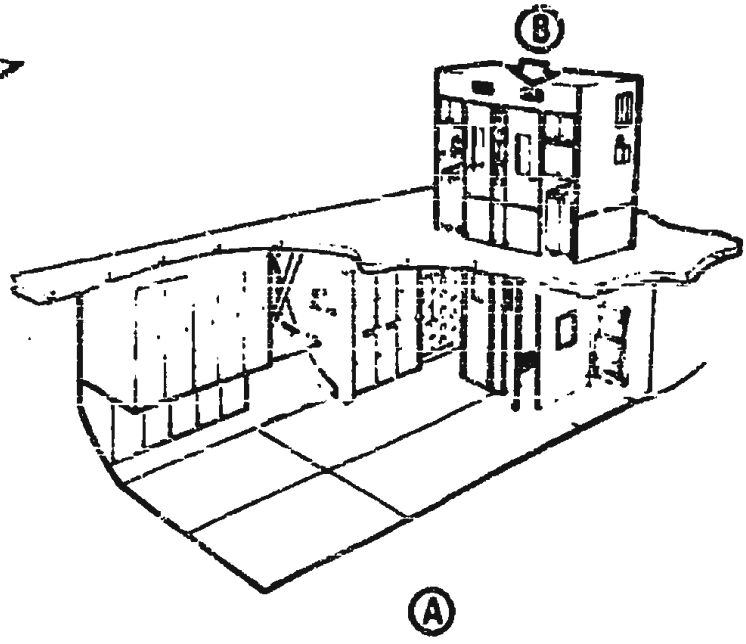
M1-0000-33-2010

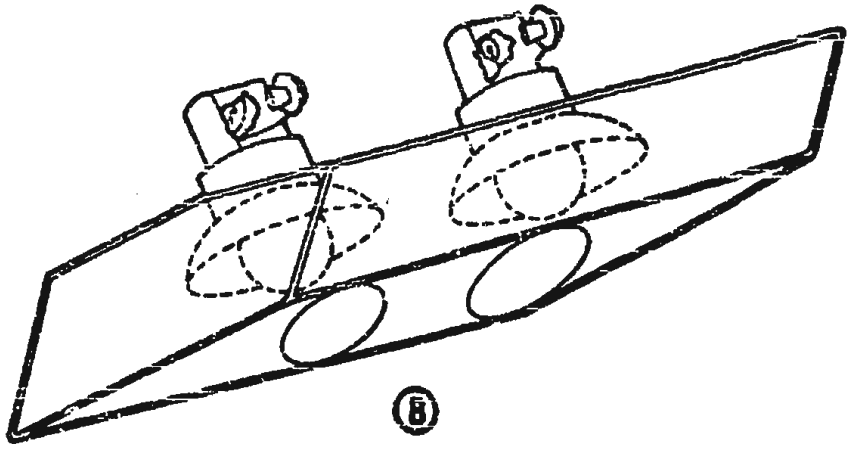
R Galley Lift Light
R Figure 4

R EFFECTIVITY: ALL
R
0028



ZONE 130

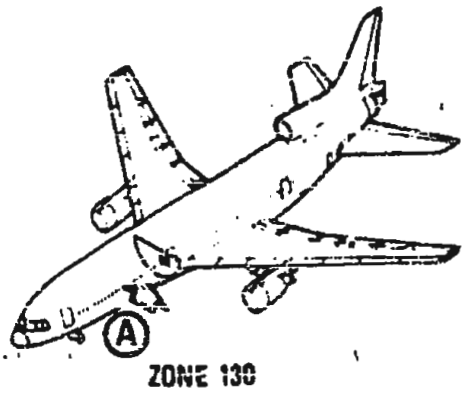


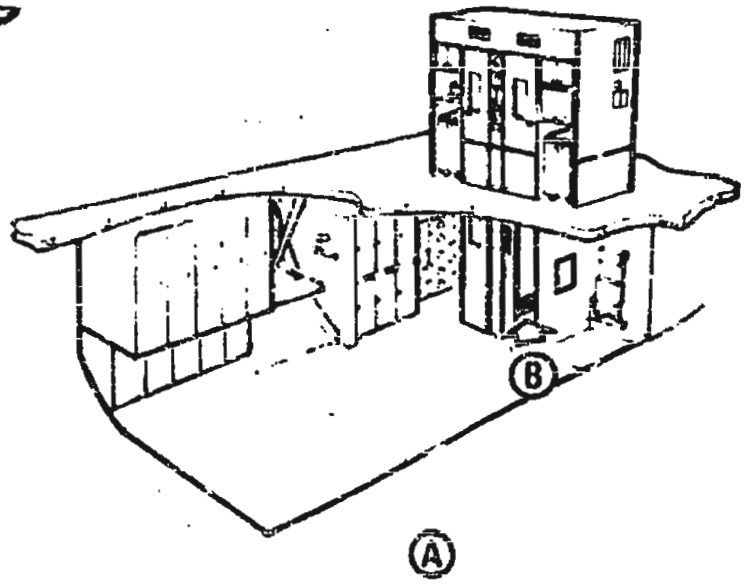


M1-0000-33-2012

R
R Upper Compartment Light
Figure 5

R EFFECTIVITY: ALL
R
0028


A
ZONE 130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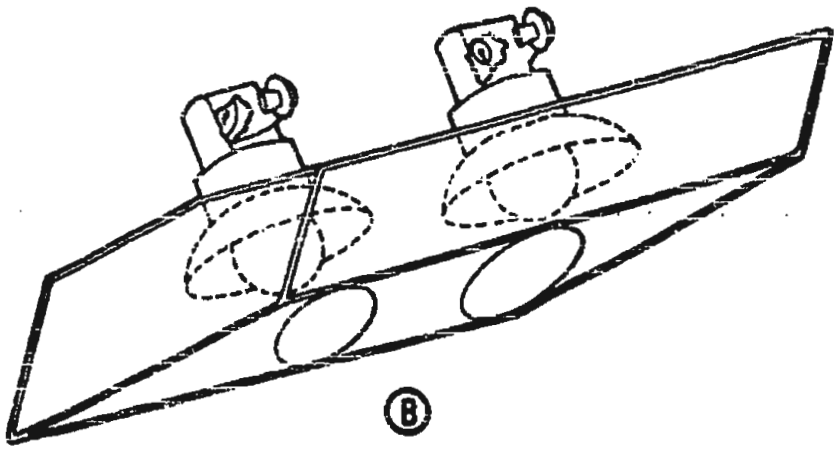
A


B

4. Galley Lift Lights

A. Description and Operation

Dual-purpose incandescent lights are incorporated in each galley light (Ref. Fig. 4) and in the upper compartment of each lift shaft (Ref. Fig. 5). One lamp is used for normal service lighting; the other is used for emergency lighting (Ref. 33-51-00).

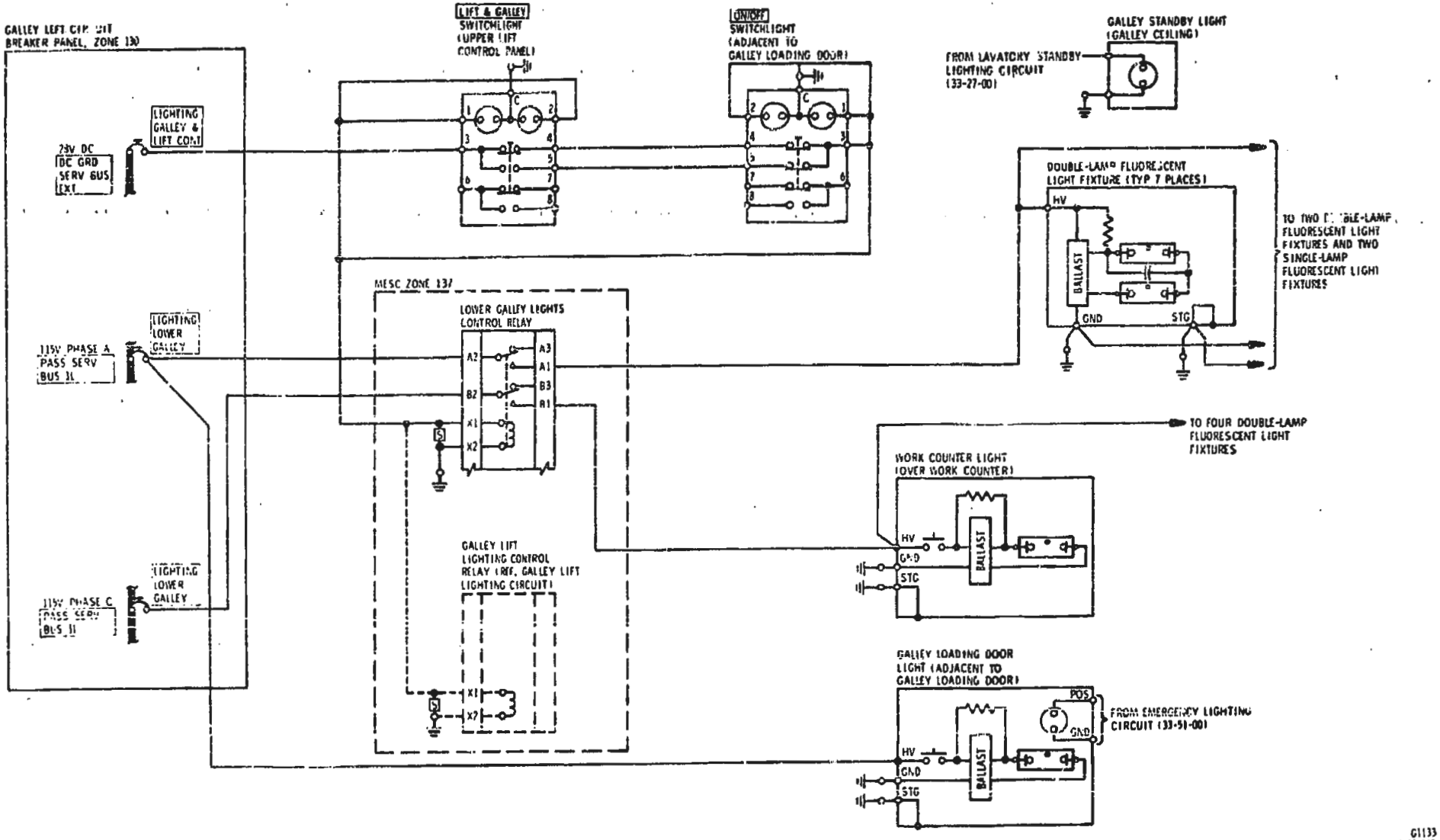
Another light is located between the two lifts to light the lower section of each shaft (Ref. Fig. 6). The light has two lamps; both are used for normal lighting.

The galley lift lights are controlled by either of the two galley switchlights (Ref. Fig. 8).

5. Galley Standby Light

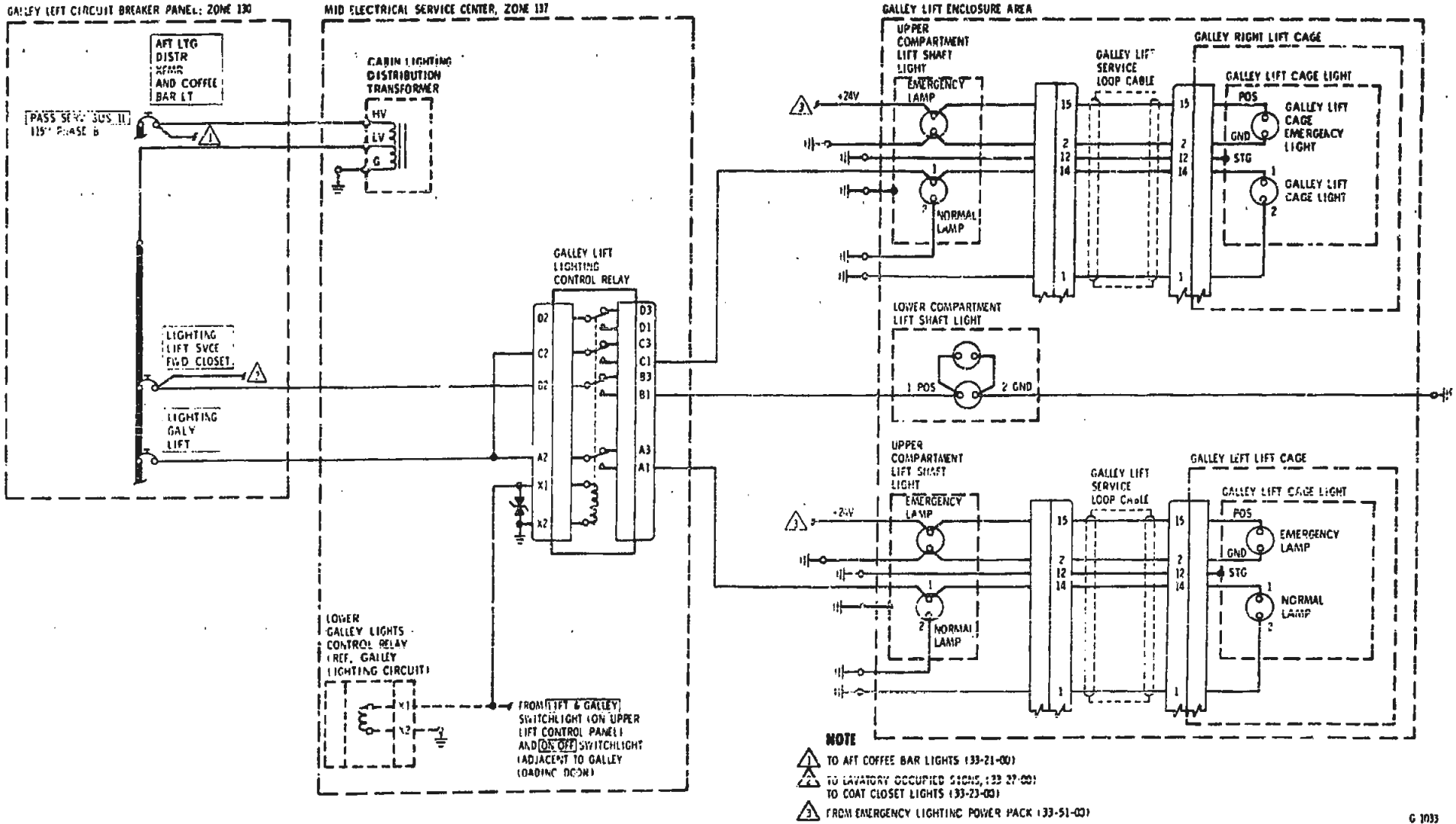
A. Description and Operation

The galley standby light is located in the galley ceiling near the lifts. The light is powered by the dc standby bus (Ref. Fig. 7). The light is on whenever the bus is energized.


GALLEY LEFT CIRCUIT BREAKER PANEL, ZONE 130
LIFT & GALLEY SWITCHLIGHT (UPPER LIFT CONTROL PANEL)
ON/OFF SWITCHLIGHT (ADJACENT TO GALLEY LOADING DOOR)
GALLEY STANDBY LIGHT (GALLEY CEILING)
FROM LAVATORY STANDBY LIGHTING CIRCUIT (33-27-00)
LIGHTING GALLEY & LIFT CONT
28V DC DC GRD SERV BUS EXT
DOUBLE-LAMP FLUORESCENT LIGHT FIXTURE (TYP 7 PLACES)
HV
BALLAST
GND
STG
TO TWO DOUBLE-LAMP FLUORESCENT LIGHT FIXTURES AND TWO SINGLE-LAMP FLUORESCENT LIGHT FIXTURES
MESC ZONE 137
LOWER GALLEY LIGHTS CONTROL RELAY
LIGHTING LOWER GALLEY
115V PHASE A PASS SERV BUS II
A2
A3
A1
B2
B3
B1
X1
X2
TO FOUR DOUBLE-LAMP FLUORESCENT LIGHT FIXTURES
WORK COUNTER LIGHT (OVER WORK COUNTER)
GALLEY LIFT LIGHTING CONTROL RELAY (REF. GALLEY LIFT LIGHTING CIRCUIT)
LIGHTING LOWER GALLEY
115V PHASE C PASS SERV BUS II
GALLEY LOADING DOOR LIGHT (ADJACENT TO GALLEY LOADING DOOR)
POS
GND
FROM EMERGENCY LIGHTING CIRCUIT (33-51-00)
G1133
EA81-0101-33-542

Galley Lighting Schematic
Figure 7

R
R
0028 EFFECTIVITY: ALL


GALLEY LEFT CIRCUIT BREAKER PANEL: ZONE 130
MID ELECTRICAL SERVICE CENTER, ZONE 137
GALLEY LIFT ENCLOSURE AREA
AFT LTG DISTR XFMR AND COFFEE BAR LT
PASS SERV BUS II 115V PHASE B
CABIN LIGHTING DISTRIBUTION TRANSFORMER
HV
LV
G
GALLEY LIFT LIGHTING CONTROL RELAY
LIGHTING LIFT SVCE FWD CLOSET
LIGHTING GALY LIFT
LOWER GALLEY LIGHTS CONTROL RELAY (REF. GALLEY LIGHTING CIRCUIT)
FROM LIFT & GALLEY SWITCHLIGHT (ON UPPER LIFT CONTROL PANEL) AND ON/OFF SWITCHLIGHT (ADJACENT TO GALLEY LOADING DOOR)
UPPER COMPARTMENT LIFT SHAFT LIGHT
EMERGENCY LAMP
NORMAL LAMP
+24V
GALLEY LIFT SERVICE LOOP CABLE
GALLEY RIGHT LIFT CAGE
GALLEY LIFT CAGE LIGHT
POS
GND
STG
GALLEY LIFT CAGE EMERGEACY LIGHT
GALLEY LIFT CAGE LIGHT
LOWER COMPARTMENT LIFT SHAFT LIGHT
1 POS
2 GND
GALLEY LEFT LIFT CAGE
NOTE
1 TO AFT COFFEE BAR LIGHTS (33-21-00)
2 TO LAVATORY OCCUPIED SIGNS, (33-27-00)
TO COAT CLOSET LIGHTS (33-23-00)
3 FROM EMERGENCY LIGHTING POWER PACK (33-51-00)
G 1033
EMI-0100-33-543

Galley Lift Lighting Schematic
Figure A

R
R
0028

EFFECTIVITY: ALL

GALLEY AND LIFT LIGHTING - ADJUSTMENT AND TEST

1. Referenced Procedure

R 24-00-00 Electrical Power - Maintenance Practices

2. Adjustment/Test

A. Operational Test

(1) Turn on electrical power (Ref. 24-00-00).

(2) On pilots overhead circuit breaker panel CB1, zone 210, verify that STBY BUS MISC - GALLEY & LAV LIGHTS circuit (L4) breaker is closed.

On galley left circuit breaker panel, zone 130, verify that the following circuit breakers are closed:

DC GRD SERV BUS EXT

LIGHTING - GALLEY & LIFT CONT

PASS SERV BUS I L

LIGHTING - GALY 1 and GALY 2

AFT LTG - DISTR XFMR & COFFEE BAR LT

On galley right circuit breaker panel, zone 130, verify that the following circuit breakers are closed:

LIGHTING - LIFT SVCE FWD CLOSET

LIGHTING - GALLEY LIFT

(3) At the upper lift control panel, depress the GALLEY - LIFT switchlight to on. Verify that the switchlight comes on.

(4) Open lift shaft door and verify that the two upper and one lower lift shaft lights are on. Verify that each lift cage light is on.

(5) In the galley, verify that the overhead lights are on.

NOTE: Cold cathode fluorescent lights may illuminate dimly and flicker following exposure to temperatures below 50°F. Allow cold cathode

fluorescent lights to warm up following a cold soak at temperatures below 50°F before evaluating performance.

(6) Actuate the galley work counter light switch. Verify that the light goes on and off. Place the switch in the on position and leave the light on.

(7) Actuate the galley loading door light switch. Verify that the light goes on and off. Place the switch in the on position and leave the light on.

(8) At the galley loading door switch panel, verify that the GALLEY - LIFT switchlight is on.

(9) Depress the GALLEY - LIFT switchlight to off and verify that the switchlight goes off.

(10) Verify that all galley lights (except standby light), lift shaft, and lift cage lights are off.

(11) Verify that the galley standby light is on.

(12) Depress the GALLEY - LIFT switchlight on the galley loading door control panel to on.

(13) Verify that the switchlight and all galley and lift lights are on.

(14) Turn off the galley loading door light and the galley work counter light, using the switches on the light fixtures.

(15) At the upper lift control panel, depress the GALLEY - LIFT switchlight to off and verify that the switchlight and all galley and lift lights are off, with the exception of the galley standby light which must remain on.

(16) Turn off electrical power (Ref. 24-00-00).

GALLEY OVERHEAD LIGHTS - REMOVAL AND INSTALLATION

1. Referenced Procedure

R 24-00-00 Electrical Power - Maintenance Practices

2. Removal/Installation

A. Removal

(1) On galley left circuit breaker panel, zone 130, open and tag two circuit breakers LIGHTING - GALY.

(2) Release fasteners and swing cover down (Ref. Fig. 401).

(3) Remove terminal block cover. Remove and tag wires on terminal block.

(4) Remove screws securing galley light to ceiling and remove light.

B. Installation

(1) Verify that circuit breakers opened in Step 2A(1) are open and tagged.

(2) Position galley light fixture on ceiling and secure with screws.

(3) Remove tags and connect wires to terminal block; install cover on terminal block.

(4) Close and secure cover.

(5) Remove tags and close circuit breakers opened in Step 2A(1).

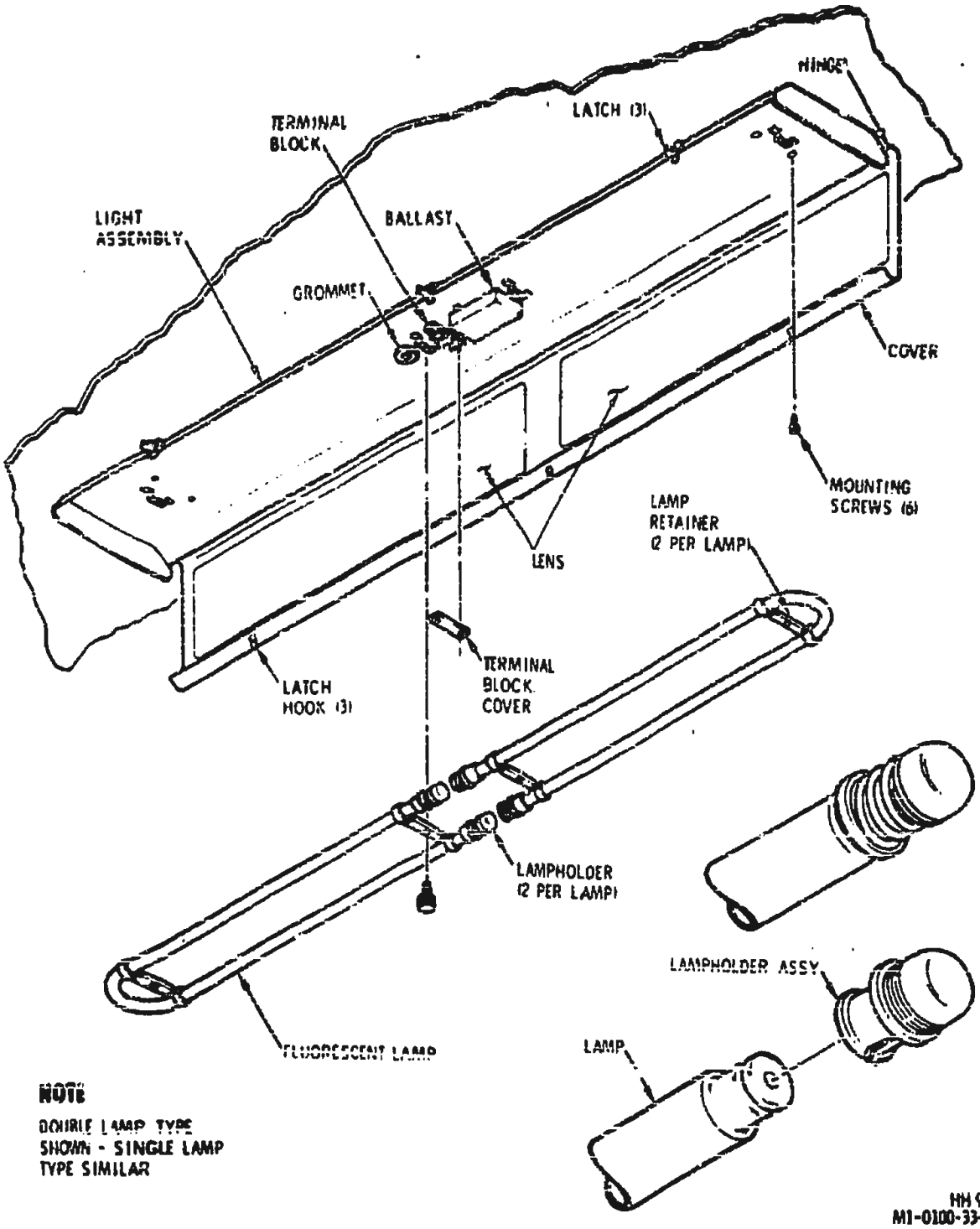
3. Relamping

A. Galley Overhead Light

(1) Verify that galley lights are off.

(2) Release fasteners and swing light cover down (Ref. Fig. 401).

(3) Release lampholders and lamp retainers to remove faulty lamp.



Galley Overhead Lights - Removal and Installation
Figure 401

(4) Install replacement lamp and secure retainers and lampholders.

(5) Turn on electrical power (Ref. 24-00-00).

(6) Turn on galley lights to test lamp. Turn lights off after test.

(7) Turn off electrical power (Ref. 24-00-00).

(8) Close light cover.

GALLEY LIFT LIGHT - REMOVAL AND INSTALLATION

1. Referenced Procedure

R 24-00-00 Electrical Power - Maintenance Practices

2. Removal/Installation

A. Removal

(1) On galley right circuit breaker panel, zone 130, open and tag circuit breaker LIGHTING - GALY LIFT.

(2) Push lift light lens up and rotate counterclockwise. Remove lens and allow to hang by lanyard.

(3) Remove mounting screws (exposed by lens removal) and pull light fixture down sufficiently to gain access to wire terminals.

(4) Remove boot insulators covering terminals. Remove and tag wires on terminals.

(5) Remove screw to disconnect ground wire.

(6) Remove lift light fixture.

B. Installation

(1) Verify that circuit breaker opened in Step 2A(1) is open and tagged.

(2) Remove tags and connect wires to terminals. Install boot insulators (Ref. Fig. 401).

(3) Install ground wire.

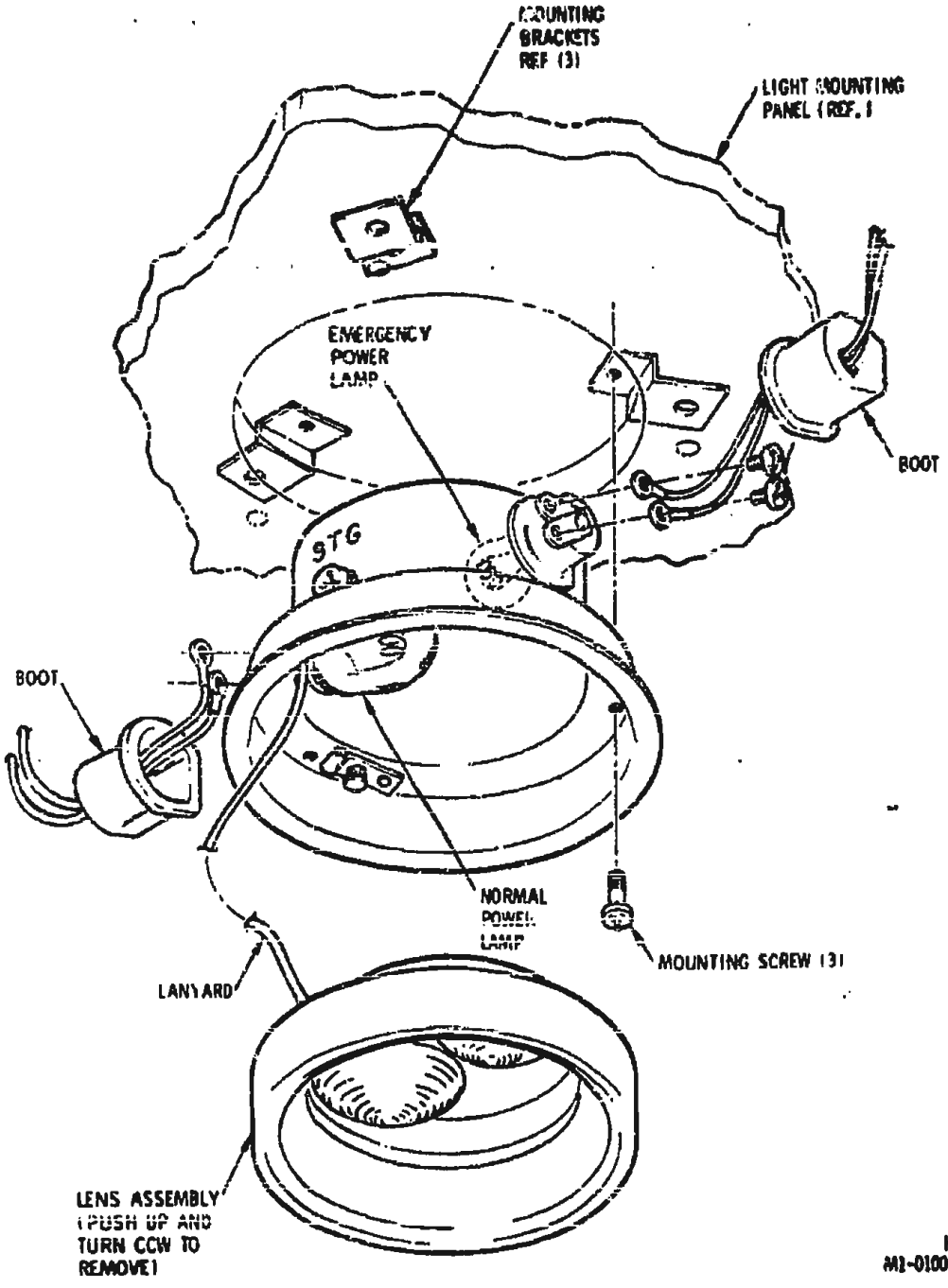
(4) Position fixture and secure with mounting screws.

(5) Replace lens.

(6) Remove tag and close circuit breaker opened in Step 2A(1).

3. Relamping

A. Normal Lamp



Galley Lift Light - Removal and Installation
Figure 401

(1) Verify that galley lights are off.

(2) Remove lift light lens by pushing up and rotating counterclockwise (Ref. Fig. 401).

(3) Remove faulty lamp.

(4) Install replacement lamp.

(5) Turn on electrical power (Ref. 24-00-00).

(6) Turn on galley lights to test lamp. Turn lights off after test.

(7) Turn off electrical power (Ref. 24-00-00).

(8) Replace lift light lens.

B. Emergency Lamp

(1) Verify that emergency lights are off.

(2) Remove lift light lens by pushing up and rotating counterclockwise (Ref. Fig. 401).

(3) Remove faulty lamp.

(4) Install replacement lamp.

(5) Test lamp by operating momentary TEST switch on the emergency power pack.

(6) Replace lens.

GALLEY WORK COUNTER LIGHT - REMOVAL AND INSTALLATION

1. Referenced Procedure

R 24-00-00 Electrical Power - Maintenance Practices

2. Removal/Installation

A. Removal

(1) On galley left circuit breaker panel, zone 130, open and tag both circuit breakers LIGHTING - GALLEY.

(2) Press release buttons and open cover on galley work counter light (Ref. Fig. 401).

(3) Pull lampholder rings back and disconnect fluorescent lamp from lampholders.

(4) Release lamp retainers and remove fluorescent lamp.

(5) Remove terminal block cover, and tag and remove wires.

(6) Withdraw wires through grommet in light housing.

(7) Remove mounting screws and remove light fixture.

B. Installation

(1) Verify that circuit breakers opened in Step 2A(1) are open and tagged.

(2) Insert aircraft wiring through grommet.

(3) Position light fixture and secure with mounting screws.

(4) Connect wiring to terminal block and remove wire tags.

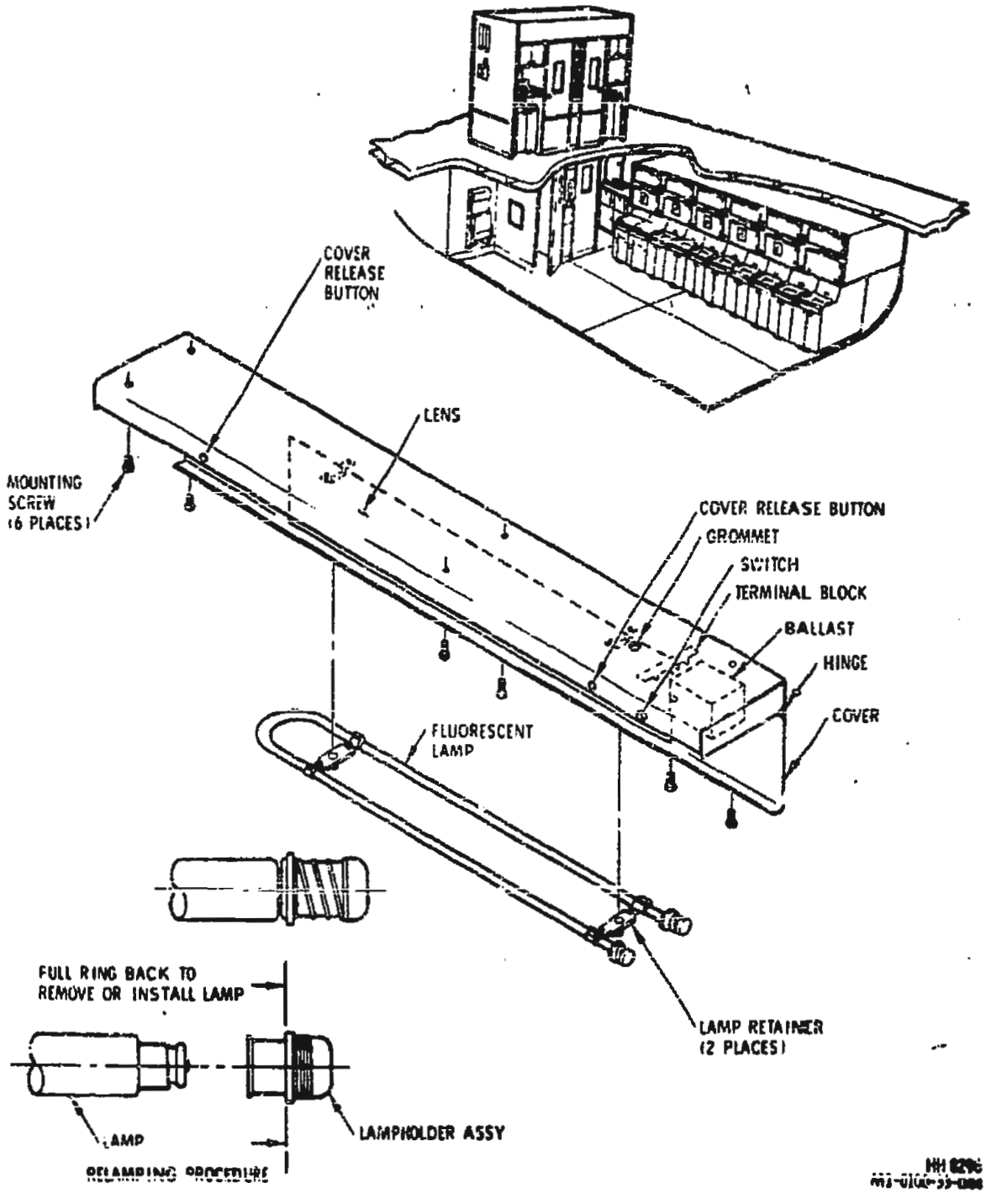
(5) Install terminal block cover.

(6) Install fluorescent lamp and secure with lamp retainers.

(7) Connect lampholders to ends of flucrescent lamp.

(8) Close cover.

(9) Remove tags and close circuit breakers opened in Step 2A(1).



Galley Work Counter Light - Removal and Installation
Figure 401

3. Relamping

A. Galley Work Counter Light

(1) Verify that light is turned off.

(2) Press release buttons and open cover (Ref. Fig. 401).

(3) Pull lampholder rings back and disconnect fluorescent lamp from holders.

(4) Release lamp retainers and remove fluorescent lamp.

(5) Install new fluorescent lamp and secure lamp retainers.

(6) Connect lampholders to ends of fluorescent lamp.

(7) Turn on electrical power (Ref. 24-00-00).

(8) Turn on galley work counter light to test lamp. Turn light off after test.

(9) Turn off electrical power (Ref. 24-00-00).

(10) Close light cover.

UPPER COMPARTMENT LIFT SHAFT LIGHT - REMOVAL AND INSTALLATION

1. Referenced Procedure

R 24-00-00 Electrical Power - Maintenance Practices

2. Removal/Installation

A. Removal

(1) On galley right circuit breaker panel, zone 130, open and tag circuit breaker LIGHTING - GALY LIFT.

(2) Position galley lift so light fixture is accessible.

(3) Release fasteners and swing hinged cover down. (Ref. Fig. 401).

(4) Remove boots from terminals, then remove and tag wires.

(5) Remove mounting screws and remove light fixture.

B. Installation

(1) Verify that circuit breaker opened in Step 2A(1) is open and tagged.

(2) Position light fixture and secure with mounting screws.

(3) Remove tags and connect wires to lamp terminals. Install boots.

(4) Close and secure cover.

(5) Remove tag and close circuit breaker opened in Step 2A(1).

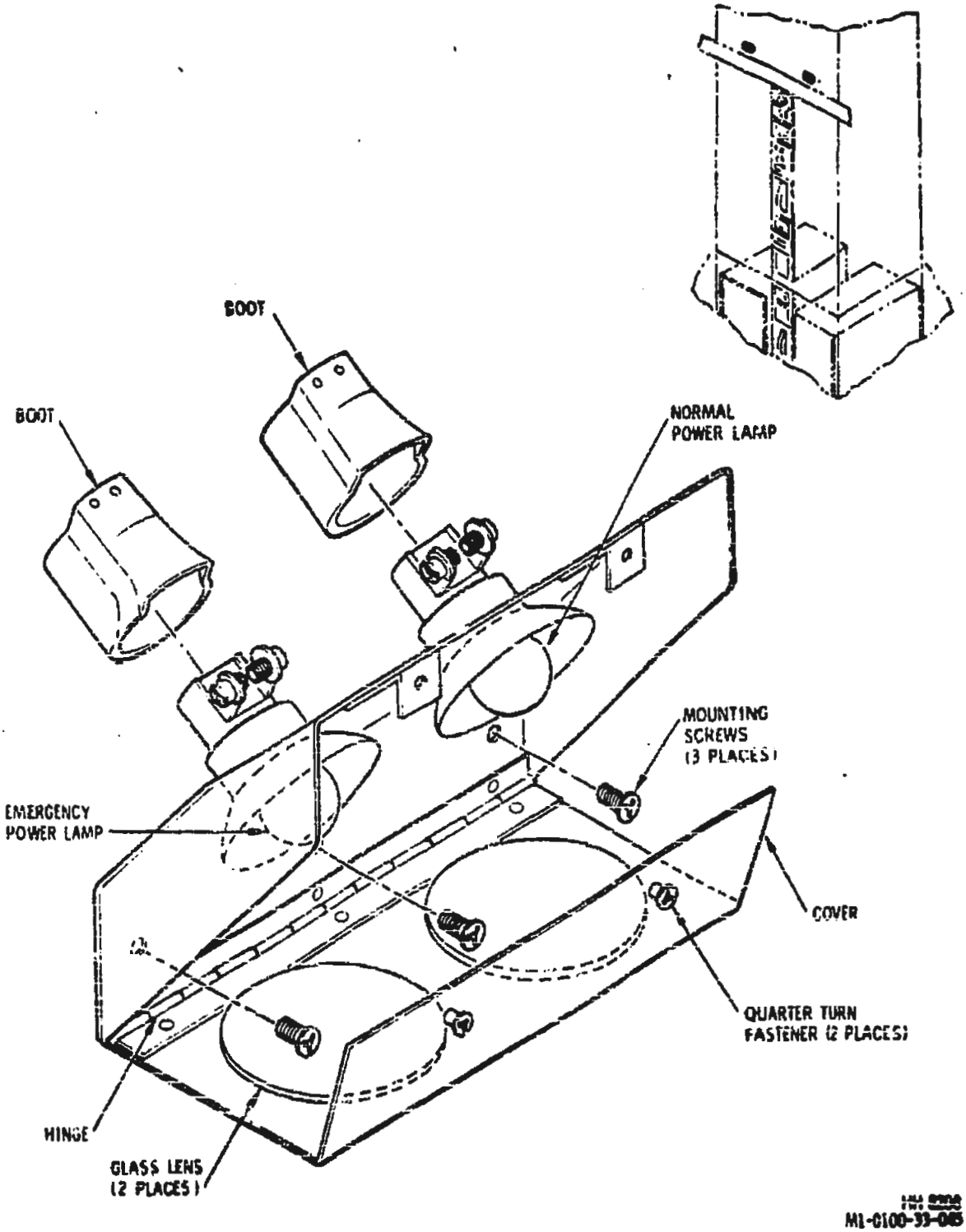
3. Relamping

A. Normal Lamp

(1) Verify that galley lights are turned off.

(2) Position galley lift so light fixture is accessible.

(3) Release fasteners and swing hinged cover down (Ref. Fig. 401).



Upper Compartment Lift Shaft Light - Removal and Installation
Figure 401

(4) Remove faulty lamp.

(5) Install new lamp.

(6) Turn on electrical power (Ref. 24-00-00).

(7) Turn on galley lights to test lamp. Turn lights off after test.

(8) Turn off electrical power (Ref. 24-00-00).

B. Emergency Lamp

(1) Verify that emergency lights are turned off.

(2) Position galley lift so light fixture is accessible.

(3) Release and swing hinged cover down (Ref. Fig. 401).

(4) Remove faulty lamp.

(5) Install replacement lamp.

(6) Test lamp by operating momentary TEST switch on emergency power pack.

(7) Close and secure hinged cover.

LOWER COMPARTMENT LIFT SHAFT LIGHT - REMOVAL AND INSTALLATION

1. Referenced Procedure

R 24-00-00 Electrical Power - Maintenance Practices

2. Removal/Installation

A. Removal

(1) On galley right circuit breaker panel, zone 130, open and tag circuit breaker LIGHTING - LIFT SVCE - FWD CLOSET.

(2) Position galley lift so light is accessible.

(3) Release fasteners and swing hinged cover down (Ref. Fig. 401).

(4) Remove boots from terminals, then remove and tag wires.

(5) Remove mounting screws and remove light fixture.

B. Installation

(1) Verify that circuit breaker opened in Step 2A(1) is open and tagged.

(2) Position light fixture and secure with mounting screws.

(3) Remove tags and connect wires to light fixture terminals. Install boots.

(4) Close and secure hinged cover.

(5) Remove tag and close circuit breaker opened in Step 2A(1).

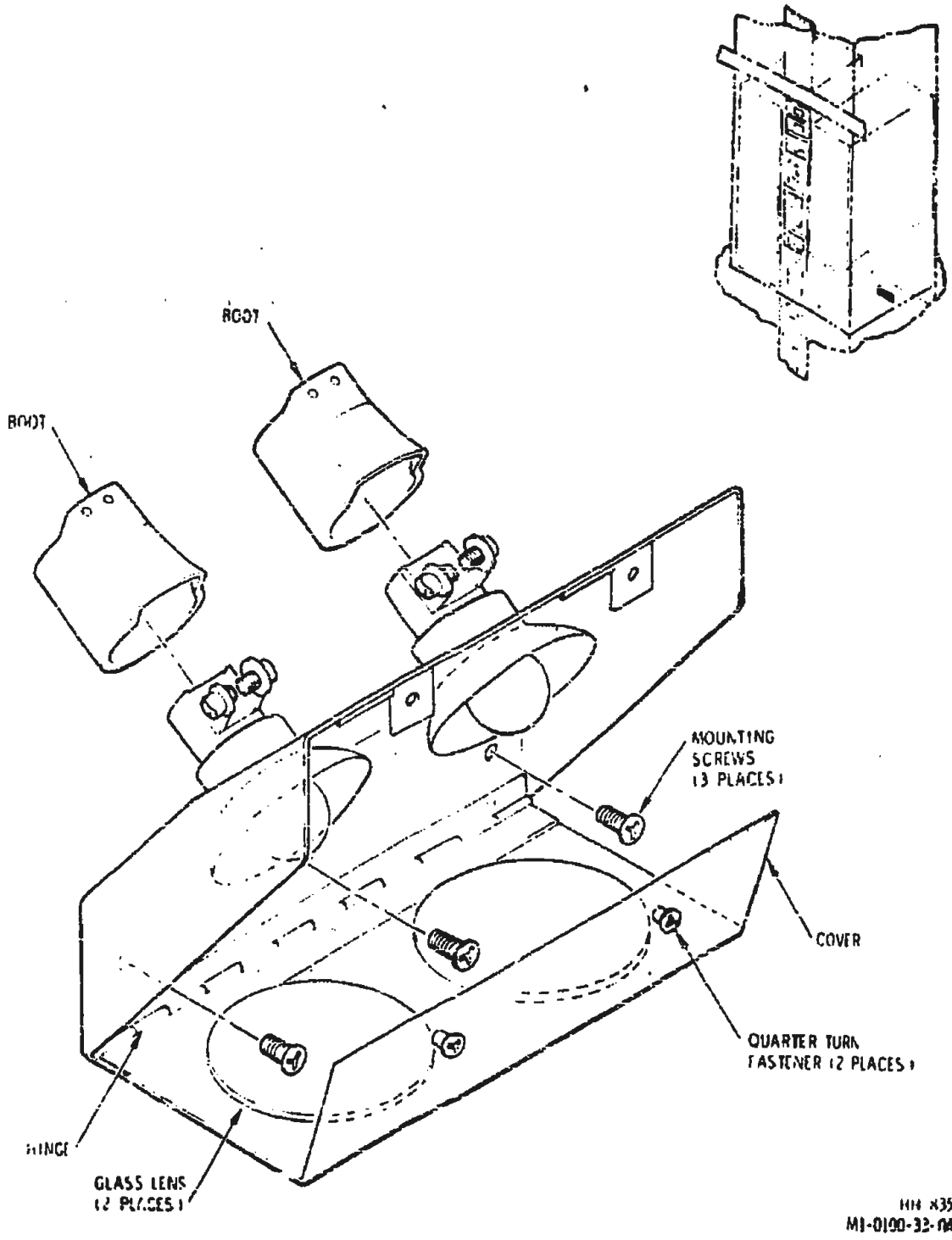
3. Relamping

A. Lower Lift Shaft Light

(1) Verify that galley lights are turned off.

(2) Position galley lift so light fixture is accessible.

(3) Release fasteners and swing hinged cover down (Ref. Fig. 401).



Lower Compartment Lift Shaft Light - Removal and Installation
Figure 401

(4) Remove faulty lamp.

(5) Install new lamp.

(6) Turn on electrical power (Ref. 24-00-00).

(7) Turn on galley lights to test lamp. Turn lights off after test.

(8) Turn off electrical power (Ref. 24-00-00).

(9) Close and secure hinged cover.

GALLEY LOADING DOOR LIGHT - REMOVAL AND INSTALLATION

1. Referenced Procedure

R 24-00-00 Electrical Power - Maintenance Practices

2. Removal/Installation

A. Removal

(1) On galley left circuit breaker panel, zone 130, open and tag circuit breakers LIGHTING - GALLEY.

(2) Release fasteners and swing hinged cover down (Ref. Fig. 401).

(3) Grasp tab of lampholders and swing lampholders open. Remove fluorescent lamp.

(4) Remove mounting screws that secure housing to brackets.

(5) Withdraw housing sufficiently to gain access to terminal block. Terminal block is accessible through cutout in underside of housing.

(6) Remove terminal block cover, then tag and remove wires. Withdraw wires through grommet at rear of housing.

B. Installation

(1) Verify that circuit breakers opened in Step 2A(1) are open and tagged.

(2) Insert wiring through grommet at rear of housing.

(3) Connect wires to terminal block and remove wire tags. Install terminal block cover.

(4) Insert housing into brackets and secure with mounting screws.

(5) Install fluorescent lamp and secure with lampholders.

(6) Close and secure hinged cover.

(7) Remove tags and close circuit breakers opened in Step 2A(1).

3. Relamping

A. Normal Lamp

(1) Verify that galley lights are turned off.

(2) Release fasteners and swing hinged cover down (Ref. Fig. 401).

(3) Grasp tab of lampholders and swing lampholders open. Remove fluorescent lamp.

(4) Insert fluorescent lamp and close lampholders.

(5) Turn on electrical power (Ref. 24-00-00).

(6) Turn on galley lights to test lamp. Turn lights off after test.

(7) Turn off electrical power (Ref. 24-00-00).

(8) Close and secure hinged cover.

B. Emergency Lamp

(1) Verify that emergency lights are off.

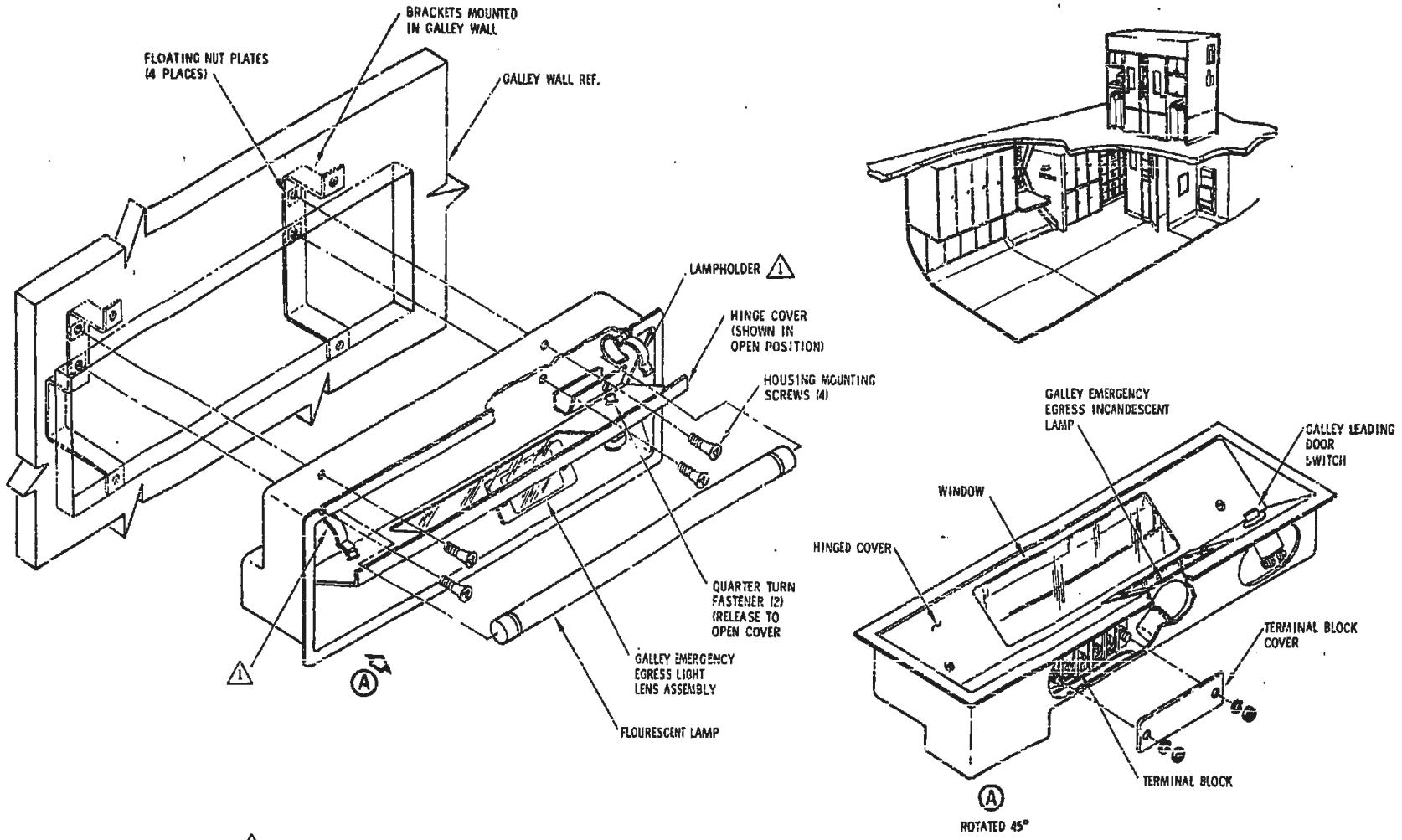
(2) Remove emergency light lens assembly.

(3) Remove faulty lamp.

(4) Install replacement lamp.

(5) Test lamp by operating momentary TEST switch on emergency power pack.

R (6) Install lens assembly.



Galley Loading Door Light - Removal and Installation
Figure 401

GALLEY STANDBY LIGHT - REMOVAL AND INSTALLATION

1. Referenced Procedure

R 24-00-00 Electrical Power - Maintenance Practices

2. Removal/Installation

A. Removal

(1) On Pilots overhead circuit breaker panel, CB1, zone 210, open and tag circuit breaker MISC - GALLEY & LAV LIGHTS.

(2) Push lens up slightly and turn CCW to remove (Ref. Fig. 401).

(3) Remove mounting screws and pull light fixture from ceiling. Tilt light fixture slightly to allow lamp socket to pass through ceiling opening.

(4) Remove insulating boot, then tag and remove wires from terminals of light fixture.

B. Installation

(1) Verify that circuit breaker opened in Step 2A(1) is open and tagged.

(2) Connect wires to terminals of light fixture and remove tags. Install insulating boot.

(3) Tilt light fixture to allow lamp socket to pass through ceiling opening, then insert light fixture into ceiling opening.

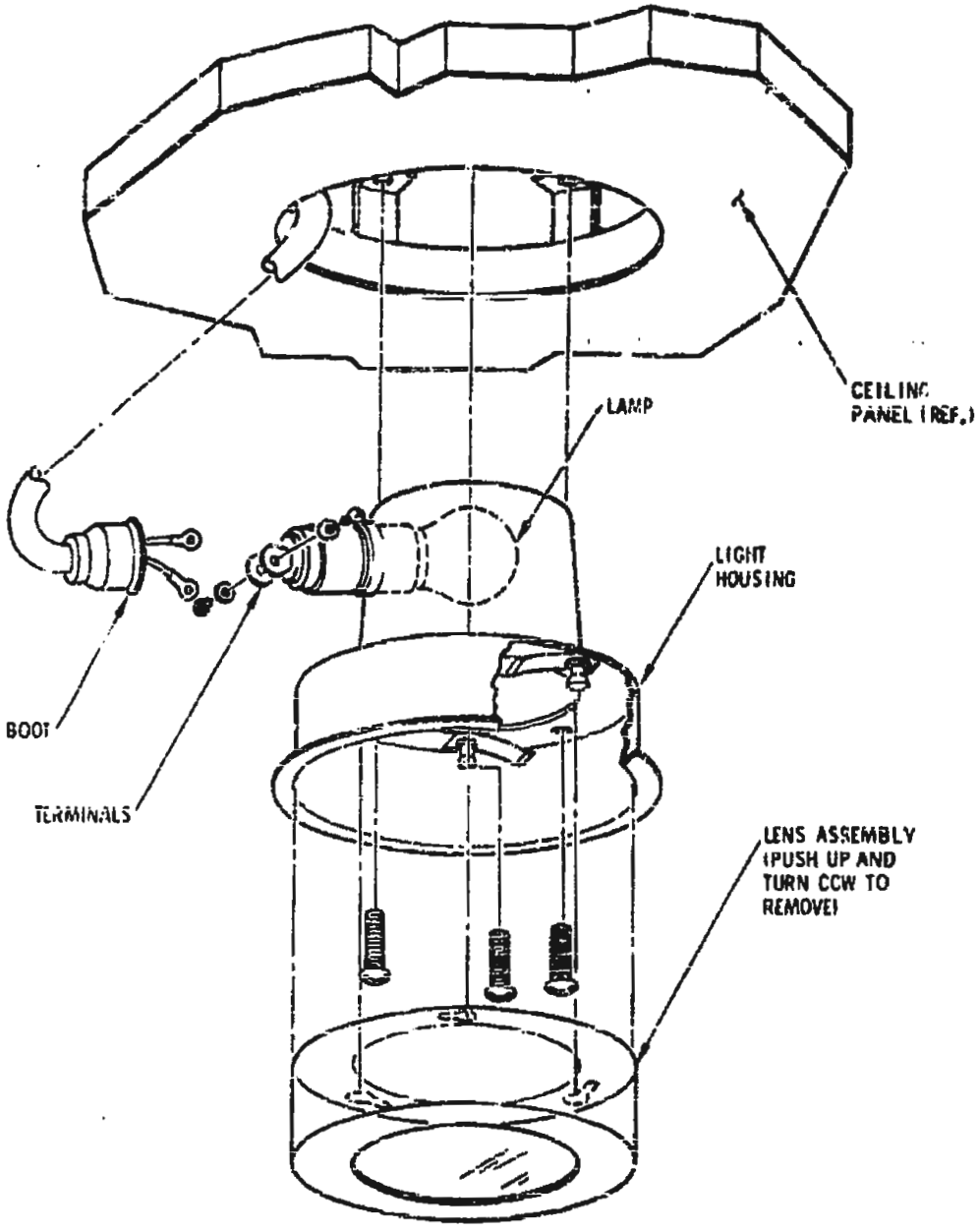
(4) Align mounting holes of light fixture with nuts of mounting brackets. Secure light fixture with screws.

(5) Replace lens. Push lens up slightly and turn CW to secure.

(6) Remove tag and close circuit breaker opened in Step 2A(1).

(7) Turn on electrical power (Ref. 24-00-00).

(8) Verify that galley standby light comes on.



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R Galley Standby Light - Removal and Installation
R Figure 401

(9) Turn off electrical power (Ref. 24-00-00).

3. Relamping

A. Galley Standby Light

(1) Turn light off by opening circuit breaker [Ref. Step 2A(1)].

(2) Push lens up slightly and turn CCW to remove (Ref. Fig. 401).

(3) Press lamp in and turn CCW to remove.

(4) Insert replacement lamp, press in and turn CW to secure.

(5) Turn on electrical power (Ref. 24-00-00).

(6) Close circuit breaker [Ref. Step 2A(1)]. Verify that galley standby light comes on.

(7) Turn off electrical power (Ref. 24-00-00).

R (8) Replace lens. Push lens up slightly and turn CW to secure.

PASSENGER CALL SYSTEM - DESCRIPTION AND OPERATION

1. General

The passenger call system uses advisory indicator lights on the underside of the EXIT locator signs. The lights are energized in response to calls initiated at passenger seats or in the lavatories, a chime also sounds to alert the attendant.

A blue light on the applicable EXIT locator sign indicates a passenger call; the seat group from which the call originated is indicated by another blue light on the applicable passenger service module. An amber light on both forward EXIT locator signs, or on either the right or left aft EXIT locator sign, as applicable, indicates a lavatory call; the lavatory from which the call originated is indicated by another amber light in the ceiling outside the lavatory. All calls can be cancelled at the
R point of origin. Lavatory calls can also be cancelled by a LAV CALL RESET switchlight on the cabin attendants panel.

The EXIT locator signs also incorporate pink and green advisory indicator lights to indicate interphone calls (Ref. 23-41-00).

On aircraft 001-031,
an amber light on both forward EXIT locator signs, or on either the right or left aft EXIT locator signs, as applicable, indicates a lavatory call; the lavatory from which the call originated is indicated by another amber light in the ceiling outside the lavatory.

On aircraft 032-999,
an amber light on both L1 and R1 door EXIT locator signs, or on either the L4 or the R4 door EXIT locator sign as applicable, indicates a lavatory call. The lavatory from which the call originated is indicated by another amber light in the ceiling outside the lavatory.

Another amber call indicator light is mounted inside each lavatory.

All calls can be cancelled at the point of origin. Lavatory calls from all the forward and aft lavatories can also be cancelled by the LAV CALL RESET switchlight on either the forward or the aft attendant panel as applicable.

The EXIT locator signs also incorporate pink and green advisory indicator lights to indicate interphone calls (Ref. 23-41-00).

2. Operation

R On aircraft 001-031,
the passenger call system is a function of the passenger service system (Ref. 23-33-00).

On aircraft 001-031,
actuating the call button on a passenger control unit or on a lavatory module applies a signal to the seat electronic unit (Ref. Fig. 1). The signal is encoded and routed to a compartment controller. The controller supplies signals to turn on the advisory indicator light on the EXIT locator sign and sound the chime; another signal is supplied to the seat or lavatory decoder, as applicable. The seat decoder turns on the light at the passenger service module to indicate the source of the call; the lavatory decoder turns on the light at the lavatory module and the ceiling light outside the lavatory.

On aircraft 032-999,
the passenger call system includes the following:

Passenger Individual Call System

Passenger Lavatory Call System

A. Passenger Individual Call System

The passenger individual call system is a function of the multiplexed passenger service system (Ref. 23-33-00).

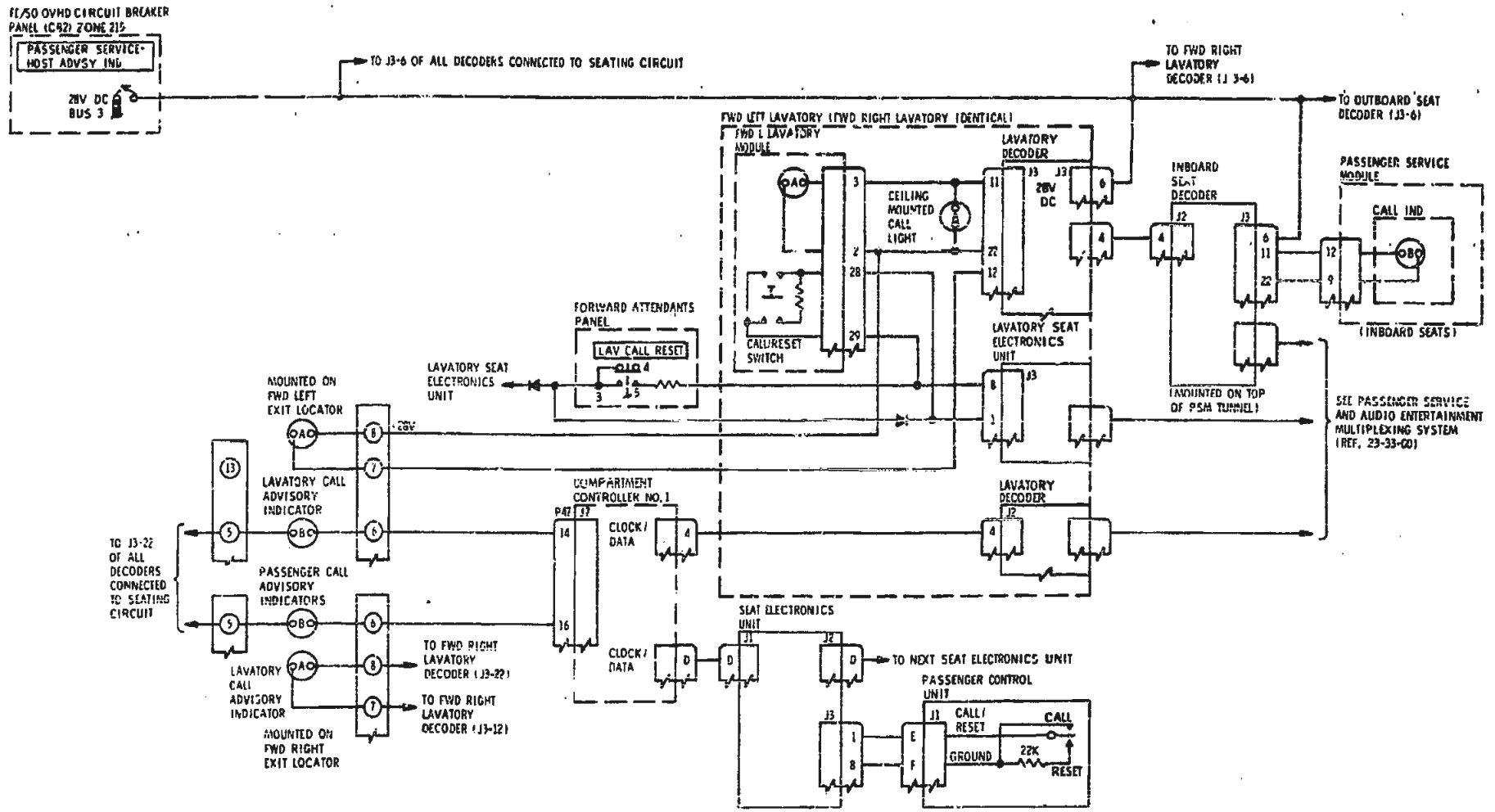
Actuating the call button on a passenger control unit applies a signal to the seat electronic unit (Ref. Fig. 1). The signal is encoded and routed to a compartment controller. The controller supplies signals to turn on the blue advisory indicator light on the EXIT locator sign and sound the chime; another signal is supplied to the overhead decoder paired with the active seat electronic unit to turn on the blue light at the passenger service module.

B. Lavatory Call System

When placing the call/reset switch in the lavatory to CALL position, power is supplied to the lavatory call relay. The relay provides power to turn on the amber indicator light at the appropriate door EXIT locator sign, and the amber call light inside and outside the lavatory. At the same time, power is supplied to the alternate chime relay. The energized contacts of the alternate chime relay to the appropriated chimes, causing the Hi-chime to sound.

The cabin interphone system (Ref. 23-41-00) and multiplexed passenger service and audio entertainment system (Ref. 23-33-00)

also supply Hi-chime to the electronic chime speakers for some of their functions. In case the call system circuit breaker is opened, the alternate chime relay will deenergize providing a path for the cabin interphone and multiplexed passenger service and audio entertainment system chime signals to the passenger address system (Ref. 23-31-00).


FE/50 OVHD CIRCUIT BREAKER PANEL (C42) ZONE 215
PASSENGER SERVICE-HOST ADVSY ING
28V DC BUS 3
TO J3-6 OF ALL DECODERS CONNECTED TO SEATING CIRCUIT
TO FWD RIGHT LAVATORY DECODER (J3-6)
TO OUTBOARD SEAT DECODER (J3-6)
FWD LEFT LAVATORY (FWD RIGHT LAVATORY IDENTICAL)
FWD L LAVATORY MODULE
LAVATORY DECODER
CEILING MOUNTED CALL LIGHT
CALL/RESET SWITCH
28V DC
INBOARD SEAT DECODER
PASSENGER SERVICE MODULE
CALL IND
(INBOARD SEATS)
(MOUNTED ON TOP OF PSM TUNNEL)
FORWARD ATTENDANTS PANEL
LAV CALL RESET
LAVATORY SEAT ELECTRONICS UNIT
MOUNTED ON FWD LEFT EXIT LOCATOR
LAVATORY SEAT ELECTRONICS UNIT
SEE PASSENGER SERVICE AND AUDIO ENTERTAINMENT MULTIPLEXING SYSTEM (REF. 23-33-00)
LAVATORY CALL ADVISORY INDICATOR
COMPARTMENT CONTROLLER NO. 1
LAVATORY DECODER
TO J3-22 OF ALL DECODERS CONNECTED TO SEATING CIRCUIT
PASSENGER CALL ADVISORY INDICATORS
CLOCK/DATA
SEAT ELECTRONICS UNIT
TO NEXT SEAT ELECTRONICS UNIT
PASSENGER CONTROL UNIT
CALL/RESET
CALL
GROUND
22K
RESET
LAVATORY CALL ADVISORY INDICATOR
TO FWD RIGHT LAVATORY DECODER (J3-22)
TO FWD RIGHT LAVATORY DECODER (J3-12)
MOUNTED ON FWD RIGHT EXIT LOCATOR

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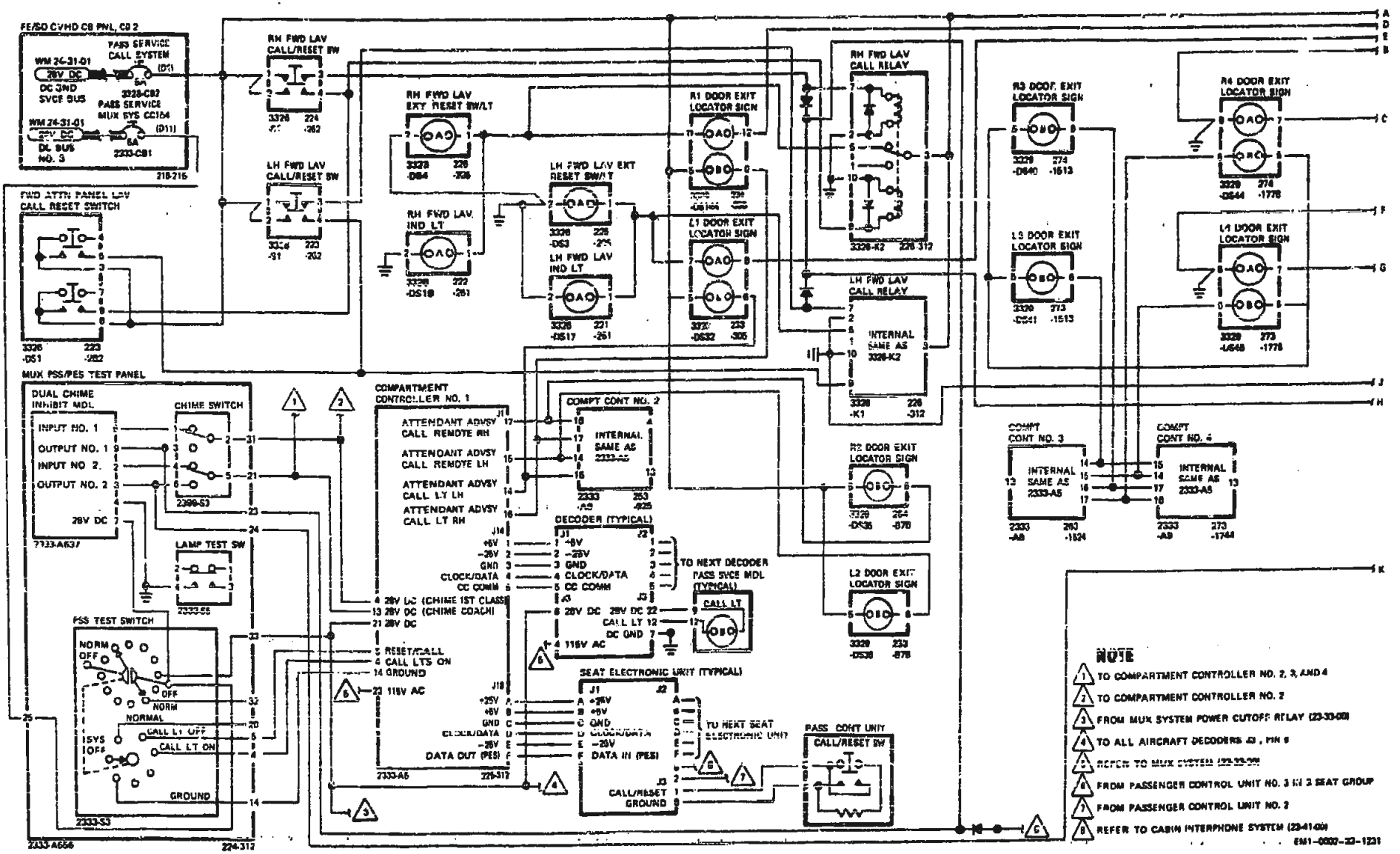
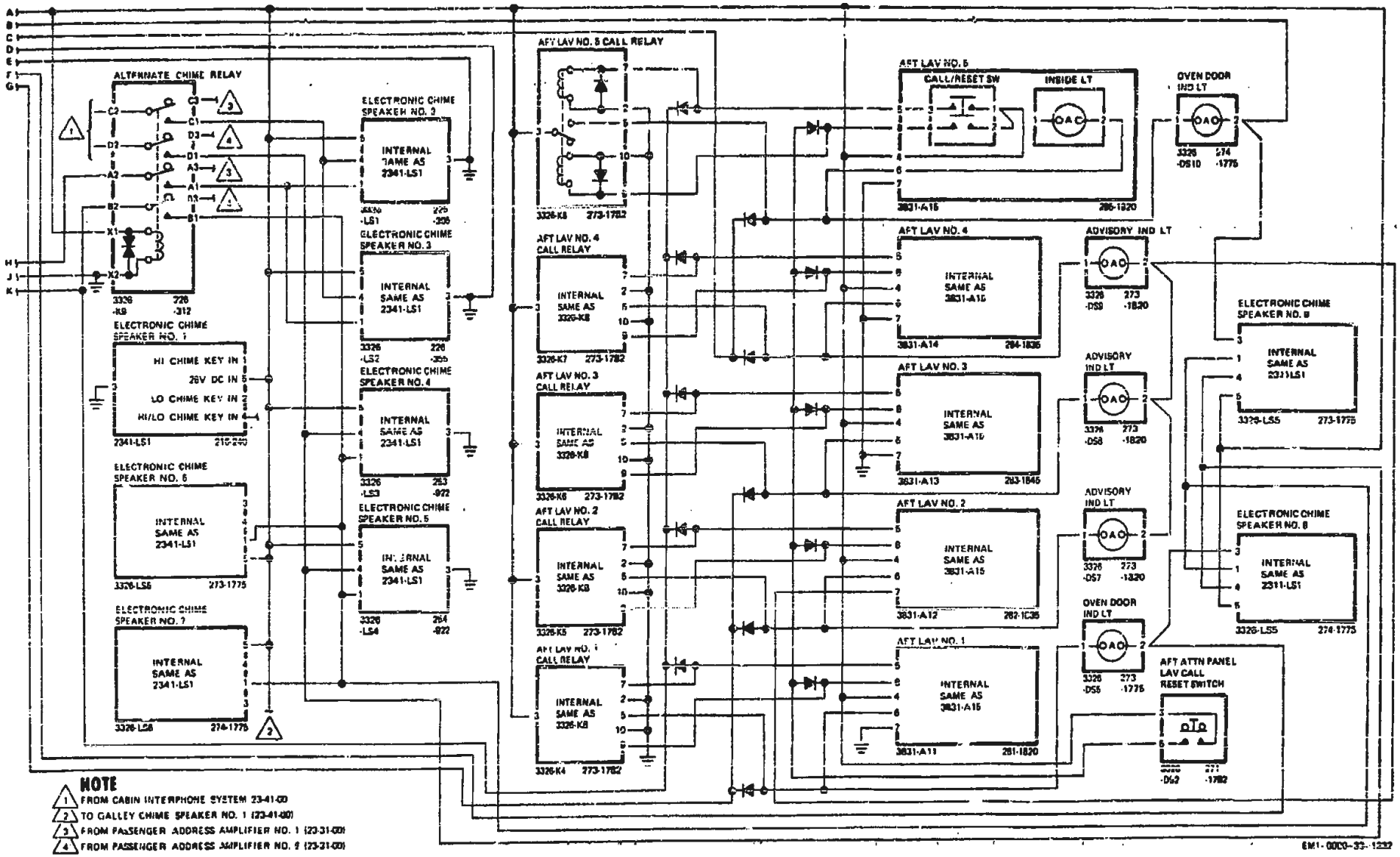
Passenger Call System Schematic
Figure 1



R R Passenger Call System Schematic
Figure 1 (Sheet 1)

R EFFECTIVITY: 032-999
R R
001B


ALTERNATE CHIME RELAY
ELECTRONIC CHIME SPEAKER NO. 1
HI CHIME KEY IN
28V DC IN
LO CHIME KEY IN
HI/LO CHIME KEY IN
ELECTRONIC CHIME SPEAKER NO. 2
ELECTRONIC CHIME SPEAKER NO. 3
ELECTRONIC CHIME SPEAKER NO. 4
ELECTRONIC CHIME SPEAKER NO. 5
ELECTRONIC CHIME SPEAKER NO. 6
ELECTRONIC CHIME SPEAKER NO. 7
INTERNAL SAME AS 2341-LS1
AFT LAV NO. 5 CALL RELAY
AFT LAV NO. 4 CALL RELAY
AFT LAV NO. 3 CALL RELAY
AFT LAV NO. 2 CALL RELAY
AFT LAV NO. 1 CALL RELAY
INTERNAL SAME AS 3326-K8
AFT LAV NO. 5
CALL/RESET SW
INSIDE LT
OVEN DOOR IND LT
AFT LAV NO. 4
AFT LAV NO. 3
AFT LAV NO. 2
AFT LAV NO. 1
INTERNAL SAME AS 3831-A15
INTERNAL SAME AS 3831-A16
INTERNAL SAME AS 3831-A13
INTERNAL SAME AS 3831-A12
INTERNAL SAME AS 3831-A11
ADVISORY IND LT
AFT ATTN PANEL LAV CALL RESET SWITCH
ELECTRONIC CHIME SPEAKER NO. 8
INTERNAL SAME AS 2341-LS1
NOTE
1 FROM CABIN INTERPHONE SYSTEM 23-41-00
2 TO GALLEY CHIME SPEAKER NO. 1 (23-41-00)
3 FROM PASSENGER ADDRESS AMPLIFIER NO. 1 (23-31-00)
4 FROM PASSENGER ADDRESS AMPLIFIER NO. 2 (23-31-00)
EM1-0000-33-1232

Passenger Call System Schematic
Figure 1 (Sheet 2)

EFFECTIVITY: 032-999

PASSENGER CALL SYSTEM - ADJUSTMENT AND TEST

1. Referenced Procedure

   24-00-00 Electrical Power - Maintenance Practices

2. On aircraft 001-031, Adjustment/Test

   A. Operational Test

   (1) Turn on electrical power (Ref. 24-00-00).

   (2) On Flight Engineer/Second Officers overhead circuit breaker panel CB2, zone 215, verify that the following circuit breakers are closed:

   PASSENGER ENTERTAINMENT - MULTIPLEX SYSTEM

   PASSENGER SERVICE - HOST ADVSY IND

   On galley left circuit breaker panel, zone 130, verify that the following circuit breakers are closed:

   POWER - PASS SVCE MDL - 1, 2, 3, 4, 5, 6, and 7

   On galley right circuit breaker panel, zone 130, verify that the following circuit breaker is closed:

   POWER SUPPLY MULTIPLEXED PASS SERVICE (H4)

   NOTE: The following tests are performed on the MULTIPLEXER PSS/PES TEST panel, zone 224.

   (3) Momentarily press LAMP TEST pushbutton switch and verify that all lamps on the test panel come on.

   (4) Actuate POWER SUPPLY toggle switch to position A and then to position B. Verify that POWER SUPPLY indicator light comes on for position A and position B.

   (5) Place the call and reading lights rotary switch in CALL LT ON position. Verify that all blue (passenger call) and amber (lavatory call) indicator lights come on. This includes the advisory indicators mounted on the EXIT locator signs. Verify that the HIGH chime sounds.

R

(6) Place the call and reading lights rotary switch in CALL/RESET position and verify that all blue and amber indicator lights go out.

(7) Place the call and reading lights rotary switch in NORM position.

R (8) Turn off electrical power (Ref. 24-00-00).

2. On aircraft 032-999, Operational tests for passenger individual call system (Para. 2A) and lavatory call system (Para 2B) are performed separately.

A. Operational Test - Passenger Individual Call System

R (1) Turn on electrical power (Ref. 24-00-00).

(2) On Flight Engineer/Second Officers overhead circuit breaker panel CB2, zone 215, verify that the following circuit breakers are closed:

PASSENGER SERVICE - MULTIPLEX SYS CC1 & CC4 (D11)

PASSENGER SERVICE - MULTIPLEX SYS CC2 & CC3 (D10)

PASSENGER SERVICE - GND SVCE CALL SYSTEM (D9)

On galley right circuit breaker panel, zone 130, verify that the following circuit breakers are closed:

MULTIPLEX COMPT CONT FAN (F5)

MULTIPLEX SYSTEM - POWER SUPPLY (E4)

On galley left circuit breaker panel, zone 130, verify that the following circuit breakers are closed:

POWER - PASS SVCE MDL DECODER 1 (F7)

POWER - PASS SVCE MDL DECODER 2 (F8)

POWER - PASS SVCE MDL DECODER 3 (F9)

POWER - PASS SVCE MDL DECODER 4 (F1)

POWER - PASS SVCE MDL DECODER 5 (F2)

POWER - PASS SVCE MDL DECODER 6 (F3)

POWER - PASS SVCE MDL DECODER 7 (F4)

POWER - PASS SVCE MDL DECODER 8 (F5)

POWER - PASS SVCE MDL DECODER 9 (F6)

NOTE: The following tests are performed on the MULTIPLEXER PSS/PES TEST panel, zone 224.

(3) Verify that the two rotary switches and the CC switch on MUX TEST panel are in the NORM position and the CHIME switch is in ON position.

(4) Momentarily press LAMP TEST pushbutton switch and verify that all lamp on the test panel come on.

(5) Activate the POWER SUPPLY test switch to position A and then to position B. Verify that the POWER SUPPLY indicator light come on at each position. Release LAMP TEST switch.

(6) Place the call and reading lights rotary switch in CALL LTS ON position. Verify that all the blue passenger call lights at the passenger service modules and all the blue advisory indicator lights on the EXIT locator signs come on. Verify that the HIGH chime sounds.

(7) Place the call and reading lights rotary switch in CALL/RESET position and verify that all the blue indicator lights go out. Verify that no chime shall sound.

(8) Place the call and reading lights rotary switch to NORM position.

R (9) Turn off electrical power (Ref. 24-00-00).

B. Operational Test - Lavatory Call System

R (1) Turn on electrical power (Ref. 24-00-00).

(2) On Flight Engineer/Second Officers overhead circuit breaker panel CB2, zone 215, verify that the following circuit breaker is closed:

PASSENGER SERVICE - GND SVCE CALL SYSTEM (D9)

(3) Pull ATTENDANT CALL switch in LH or RH Forward Lavatory. Verify that the HIGH chime sounds from the electronic chimes in the L1 and R1 door areas. Verify that the amber indicator light inside the lavatory, in the ceiling outside the lavatory, and the amber advisory indicator light under the L1 door EXIT locator sign (for calls from LH forward lavatory) or R1 door

EXIT locator sign (for calls from RH forward lavatory) come on.

(4) Momentarily depress the ATTENDANT CALL switch and verify that all the three lights go out.

(5) Repeat the same steps for the other forward lavatory.

(6) Pull ATTENDANT CALL switches in both forward lavatories to turn on all the forward amber indicator lights.

(7) Momentarily depress the LAV CALL RESET switch on the forward LH attendant panel. Verify that all the forward amber indicator lights go out.

(8) Pull ATTENDANT CALL switch in one of the aft lavatories. Verify that the HIGH chime sounds from the electronic chimes in the L2, R2, L3, R3, L4 and R4 door areas.

Verify that the amber indicator light inside the lavatory, in the ceiling outside the lavatory, and the amber advisory light under the L4 door EXIT locator sign (for calls from aft lavatories NO. 1, NO. 2 and NO. 3) or the R4 door EXIT locator sign (for calls from aft lavatories NO. 4 and NO. 5) all come on.

(9) Momentarily depress the same switch and verify that all the three amber lights go out.

(10) Repeat the same steps for the other four aft lavatories.

(11) Pull the ATTENDANT CALL switch in each aft lavatory to turn on all the aft lavatory amber indicator lights and advisory indicator lights.

(12) Momentarily depress the LAV CALL RESET switch on the aft LH attendants panel.

Verify that all the amber lights inside, in the ceiling outside of the aft lavatories NO. 1, 2, 3, 4 and 5, and the amber advisory indicator lights under the L4 and the R4 door EXIT locator signs go out.

R (13) Turn off electrical power (Ref. 24-00-00).

PASSENGER CALL INDICATOR - REMOVAL AND INSTALLATION

1. Referenced Procedures

R 24-00-00 Electrical Power - Maintenance Practices

25-22-00 Passenger Compartment Service Modules - Maintenance Practices

2. Equipment

Lens and Lamp Removal Tool - Small tweezers with curved grips covered with soft plastic or tape.

NOTE: A simple shop aid may be made from a short length (2 to 3 inches) of soft flexible plastic tubing (TYGON, or equivalent) that will slip over lens (3/16 inch ID) and lamp (1/8 inch ID) with a slight stretch fit.

3. Removal/Installation

For removal and installation of the passenger call light fixture, refer to 25-22-00.

C NOTE: Original equipment call lights are relampable. Refer to
C paragraph 4.A. for relamping procedure.

C NOTE: Replacement call lights are non-replaceable. Refer to
C paragraph 5 for light replacement procedure.

4. Relamping

A. On aircraft 001-031,
Passenger Call Lamp Replacement

(1) On galley left circuit breaker panel, zone 130, open and tag the following circuit breakers:

GALLEY AC BUS 2 - POWER - PASS SVCE MDL 1, 2, and 3

GALLEY AC BUS 3 - POWER - PASS SVCE MDL 4 through 7

On galley right circuit breaker panel, zone 130, open and tag the following circuit breaker:

PASS. SVCE BUS 3R - POWER SUPPLY - MULTIPLEXED PASS SERVICE

On Flight Engineer/Second Officers overhead circuit breaker panel CB2, zone 215, open and tag the following circuit breakers:

PASSENGER ENTERTAINMENT - MULTIPLEX SYSTEM (D11)

PASSENGER SERVICE - HOST ADVSY IND (C8)

(2) Remove blue lens by using tweezers or slipping plastic tubing over lens, and with finger tips close to lens. Squeeze lightly and pull lens from fixture.

(3) Remove lamp from fixture in same manner using caution not to break lamp bulb from lamp base.

(4) Position replacement lamp in fixture with base protrusions aligned with base keyway.

(5) Carefully push lamp into base; do not force.

(6) Install blue lens onto fixture.

R (7) Turn on electrical power (Ref. 24-00-00).

(8) Close circuit breakers opened in Step (1).

(9) Check passenger call lamp by pulling STEWARDESS call button at applicable seat position.

R (10) Turn off electrical power (Ref. 24-00-00).

A. On aircraft 032-999,
Passenger Call Lamp Replacement

(1) On Flight Engineer/Second Officers overhead circuit breaker panel CB2, zone 215, open and tag the following circuit breakers:

PASSENGER SERVICE - MULTIPLEX SYSTEM CC1 & CC4 (D11)

PASSENGER SERVICE - MULTIPLEX SYSTEM CC2 & CC3 (D10)

PASSENGER SERVICE - GND SVCE CALL SYSTEM (D9)

On galley right circuit breaker panel, zone 130, open and tag the following circuit breakers:

MULTIPLEX COMPT CONT FANS (F5)

MULTIPLEX SYSTEM - POWER SUPPLY (E4)

On galley left circuit breaker panel, zone 130, open and tag the following circuit breakers:

POWER - PASS SVCE MDL 1 (F7)

POWER - PASS SVCE MDL 2 (F8)

POWER - PASS SVCE MDL 3 (F9)

POWER - PASS SVCE MDL 4 (F1)

POWER - PASS SVCE MDL 5 (F2)

POWER - PASS SVCE MDL 6 (F3)

POWER - PASS SVCE MDL 7 (F4)

POWER - PASS SVCE MDL 8 (F5)

POWER - PASS SVCE MDL 9 (F6)

(2) Remove blue lens by using tweezers or slipping plastic tubing over lens, and with finger tips close to lens, unscrew the lens from fixture.

(3) Remove lamps.

(4) Install replacement lamps into socket.

(5) Screw blue lens back to call light fixture.

R (6) Turn on electrical power (Ref. 24-00-00).

(7) Close circuit breakers opened in Step (1).

(8) Check passenger call lamp by pulling ATTENDANT CALL switch on applicable passenger control unit at the passenger seat position.

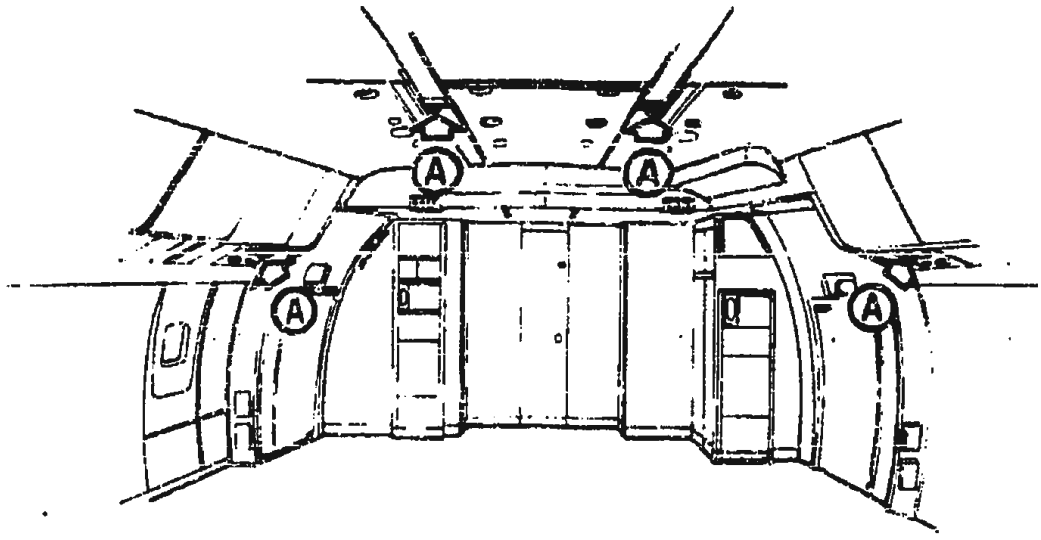
R (9) Turn off electrical power (Ref. 24-00-00).

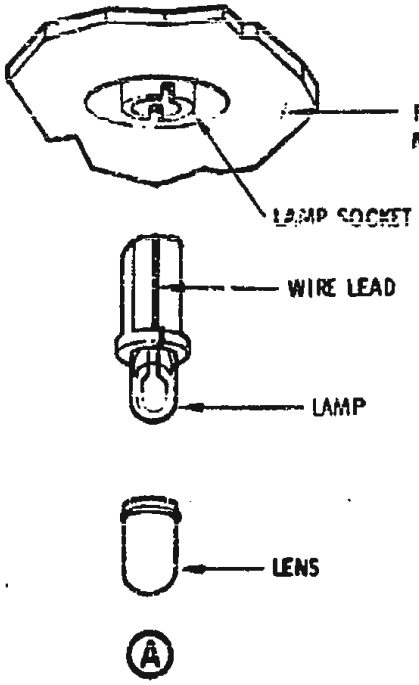
C 5. Passenger Call Light Replacement

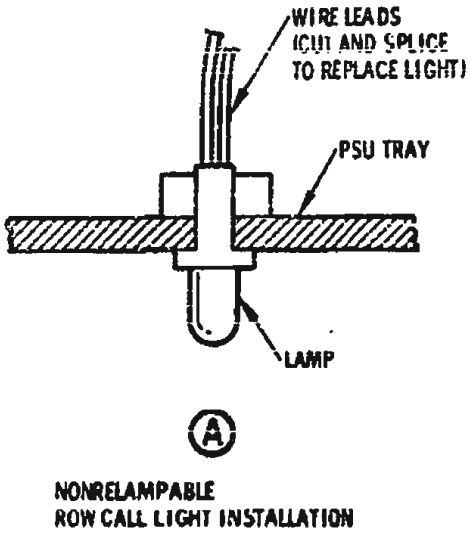
C A. On galley left circuit breaker panel, zone 130, open and tag
C the following circuit breakers:

C GALLEY AC BUS 2 - POWER - PASS SERV MDL 1, 2, and 3

C GALLEY AC BUS 3 - POWER - PASS SERV MDL 4 THROUGH 7







NONRELAMPABLE
ROW CALL LIGHT INSTALLATION

NOTE

ALIGN WIRE LEADS OF LAMP WITH GROOVES IN LAMP SOCKET BEFORE RELAMPING.

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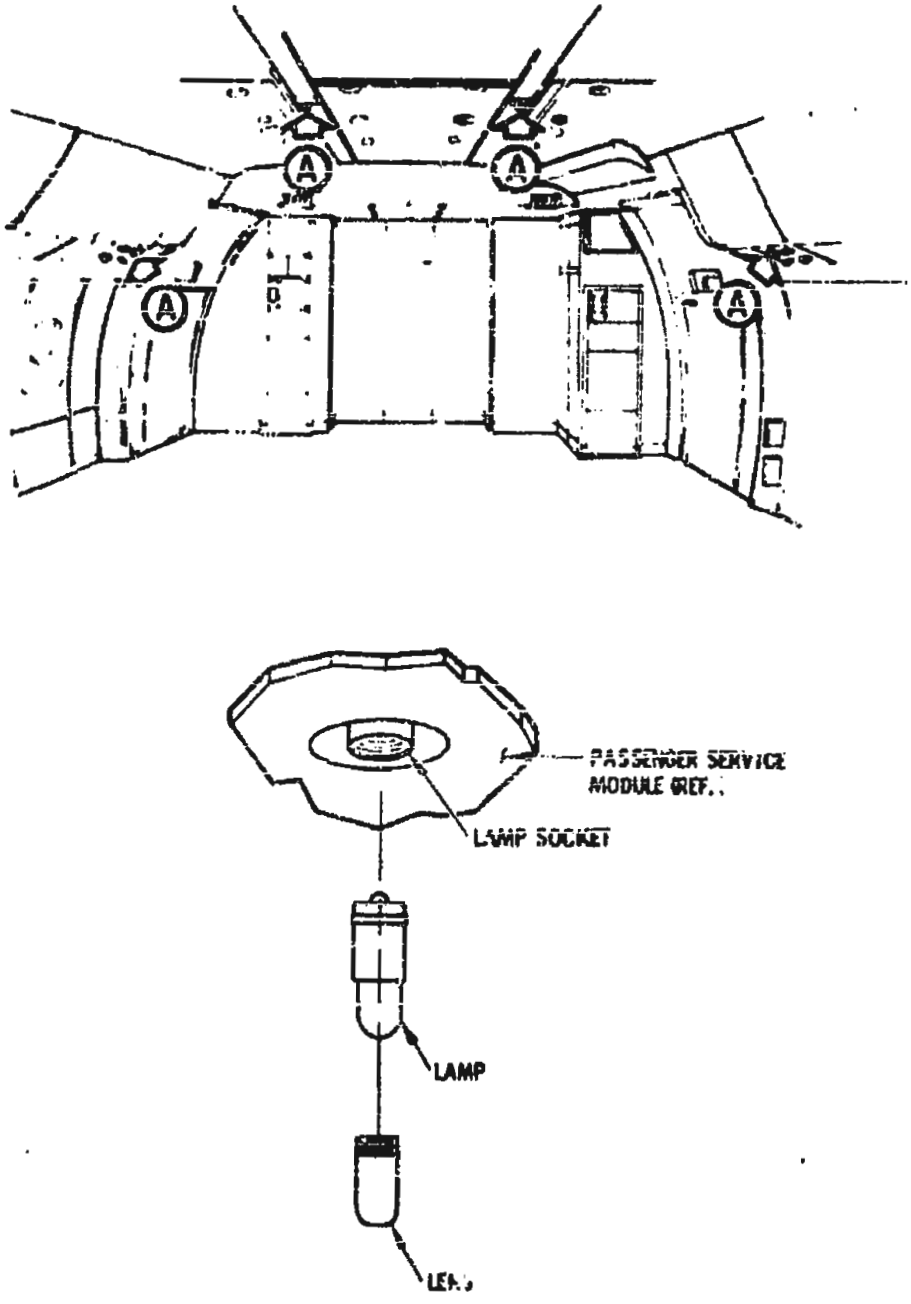
CR
CR

Passenger CALL Indicator - Relamping
Figure 401



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Passenger Call Indicator - Relamping
Figure 401

CR On galley right circuit breaker panel, zone 130, open and
CR tag circuit breaker, PASS. SERV BUS 3R - POWER SUPPLY -
CR MULTIPLEXED PASS SERVICE.

CR On Flight Engineer/Second Officer's overhead circuit breaker
CR panel C82, zone 215, open and tag the following circuit
CR breakers:

CR PASSENGER ENTERTAINMENT - MULTIPLEX SYSTEM (D11)

CR PASSENGER SERVICE - HOST ADVSY IND (CB)

CR B. Remove Call Light.

CR (1) Lower passenger service module (PSM) to its servicing
CR position

CR (2) Cut electrical wires to call light and remove light and
CR wires from front side of PSM.

CR (1) Lower passenger service module (PSM) to its servicing
CR position.

CR (2) Cut electrical wires to call light and remove light and
CR wires from front side of PSM.

CR C. Install Call Light.

CR (1) Place call light wires through mounting hole.

CR (2) Apply a coat of 140 adhesive to inside of light
CR mounting and install call light. Remove any excess
CR adhesive.

CR (3) Cut light wires to length and splice to aircraft
CR wiring.

CR (4) Restore PSM to normal position.

CR (5) Close circuit breakers opened in paragraph 5.A.

CR (6) Check passenger call light by pulling STEWARDESS call
CR button at applicable seat position.

CR (7) Turn off electrical power (Ref. 24-41-00).

LAVATORY CALL INDICATOR - REMOVAL AND INSTALLATION

1. General

This procedure applies to the lavatory call indicator mounted on the ceiling panel outside the lavatory door and to the indicator mounted on the wall inside the lavatory.

2. Referenced Procedures

24-00-00 Electrical Power - Maintenance Practices

R 25-26-01 Forward, Mid and Aft Ceiling Trim Drop Panels - Removal and Installation

3. Removal/Installation

A. Removal

(1) On aircraft 001-031,
On Flight Engineer/Second Officers overhead circuit breaker panel CB2, zone 215, open and tag circuit breaker PASSENGER SERVICE - HOST ADVSY IND.

(1) On aircraft 032-999,
on Flight Engineer/Second Officers overhead circuit breaker panel CB2, zone 215, open and tag circuit breaker PASSENGER SERVICE - CALL SYSTEM (D9).

R (2) Lower applicable ceiling panel (Ref. 25-26-01) for indicator mounted on ceiling panel outside lavatory door. Remove trim cover for indicator mounted inside lavatory (Ref. Fig. 401).

(3) Remove electrical wire to end terminal of indicator.

(4) Remove nut, internal tooth lock washer, flat washer, and electrical terminal on body of indicator. Remove indicator.

B. Installation

R (1) Verify circuit breaker opened in Step 3A(1) is open and tagged.

(2) Mount one flat washer on body of indicator, then install indicator through hole in ceiling panel or

through hole in lavatory wall bracket, as applicable (Ref. Fig. 401).

(3) Install electrical wire with large terminal on body of indicator. Install flat washer, internal tooth lockwasher, and nut. Secure nut. Replace wire connection to end terminal of indicator.

R (4) Replace ceiling panel (Ref. 25-26-01) or lavatory trim cover, as applicable.

(5) Remove tag and close circuit breaker opened in Step 3A(1).

(6) Turn on electrical power (Ref. 24-00-00).

R (7) In the lavatory, pull the call switch and verify associated amber call lights come on.

R (8) Depress call switch to the reset position and verify
R amber call lights go off.

(9) Turn off electrical power (Ref. 24-00-00).

4. Relamping

A. Lavatory Call Indicator

(1) On aircraft 001-031,
R Verify lavatory call circuit is inactive by depressing MASTER LAV RESET switchlight on forward or aft attendants control panel, as applicable.

(1) On aircraft 032-999,
on Flight Engineer/Second Officers overhead circuit breaker panel CB2, zone 215, open and tag circuit breaker PASSENGER SERVICE - CALL SYSTEM (D9).

(2) Unscrew and remove lens cap, and remove lamp from lens cap.

NOTE: If relamping indicator inside lavatory, just remove trim cover.

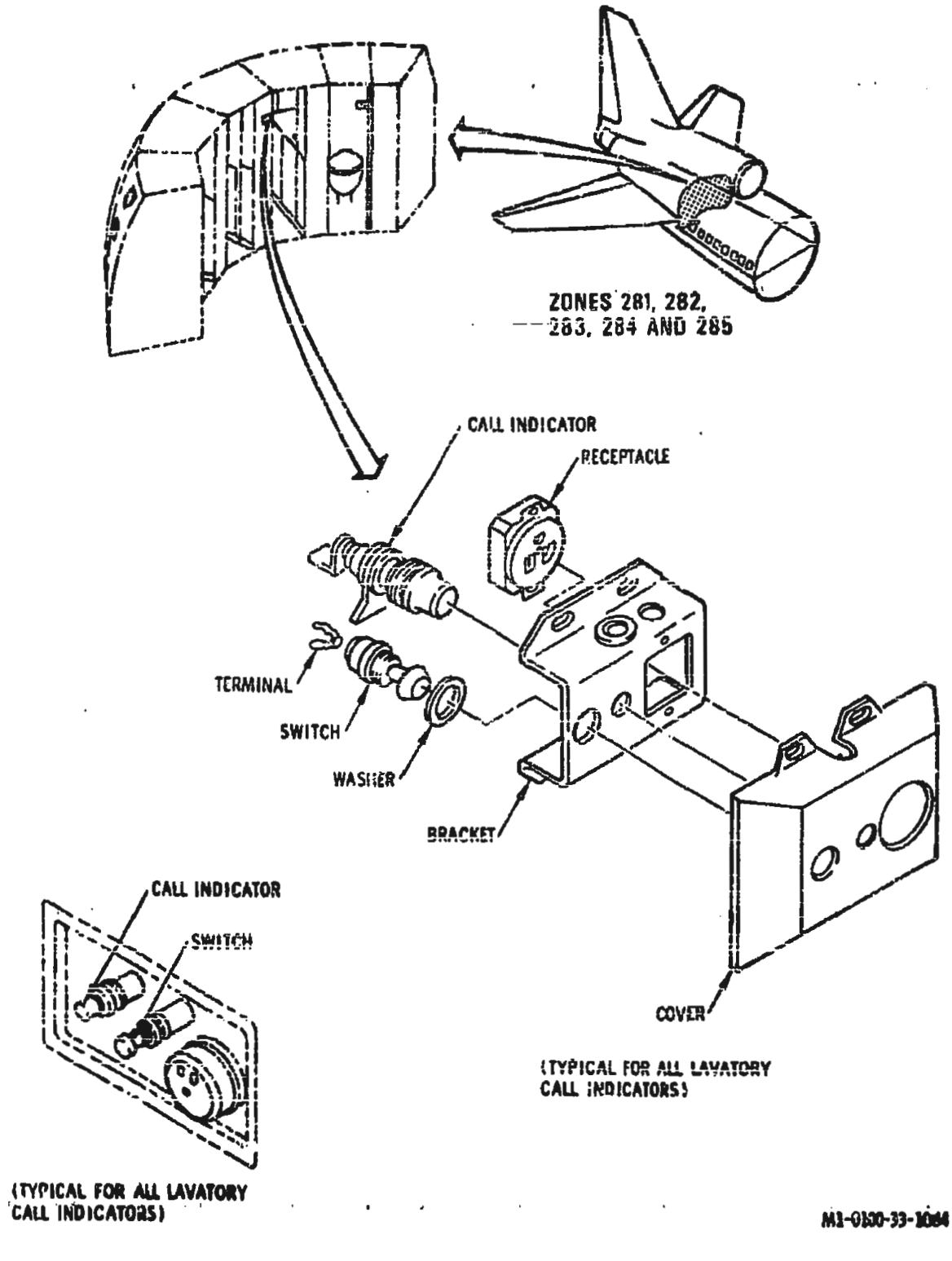
(3) Install replacement lamp in lens cap and screw lens cap into indicator socket.

(4) Turn on electrical power (Ref. 24-00-00).

R (5) In the lavatory, pull the call switch, and verify
R associated amber call lights come on. Depress call

R switch to the reset position and verify amber call
R lights go off.

(6) Turn off electrical power (Ref. 24-00-00).



Lavatory Call Indicator - Removal and Installation
Figure 401

LAVATORY LIGHTING - DESCRIPTION AND OPERATION

1. General

Each lavatory light fixture includes flourescent lamps that come on bright or dim and are powered by single-phase 115V ac and incandescent lamps that are powered by 28V dc. The low-intensity incandescent lamps provide standby lighting only, and are on whenever the dc standby bus is energized.

2. Operation

The fluorescent lamps are energized through relays controlled by
R MASTER LAV switchlights on the attendants panels.

The intensity of the light is controlled by a bright-dim switch actutated by the lavatory door latch. When the door is unlatched, the light is in the dim mode; when the latch bolt is moved to the OCCUPIED position, the light is switched to the bright mode.

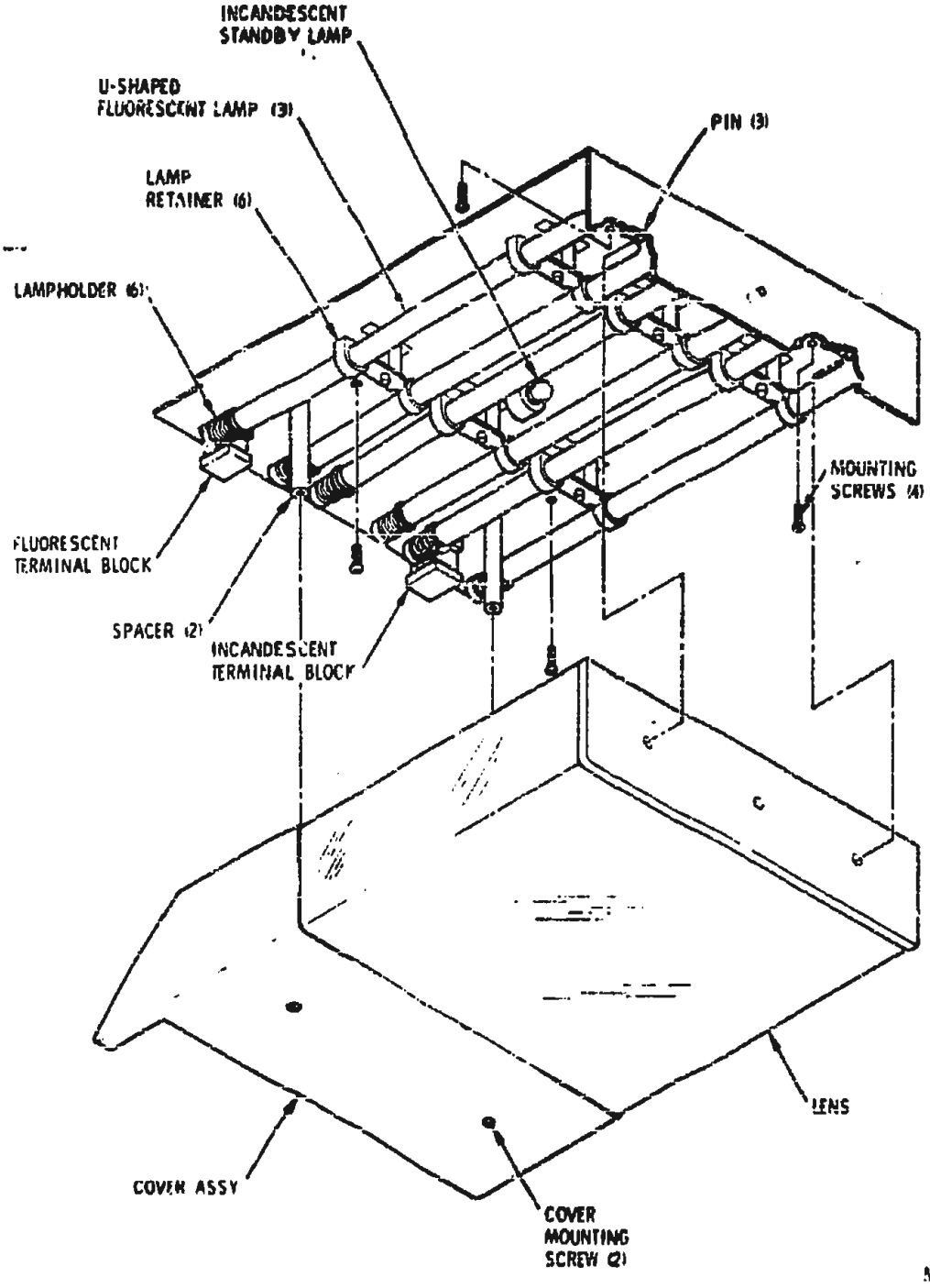
The door latch switches also control the LAVATORIES OCCUPIED signs.

The LAVATORIES portion of the aft LAVATORIES OCCUPIED signs is lighted at all times when the MASTER LAV switchlight is on. When all aft lavatories are occupied, the door latch switches complete a series circuit to a control relay which energizes the OCCUPIED portion of the signs.

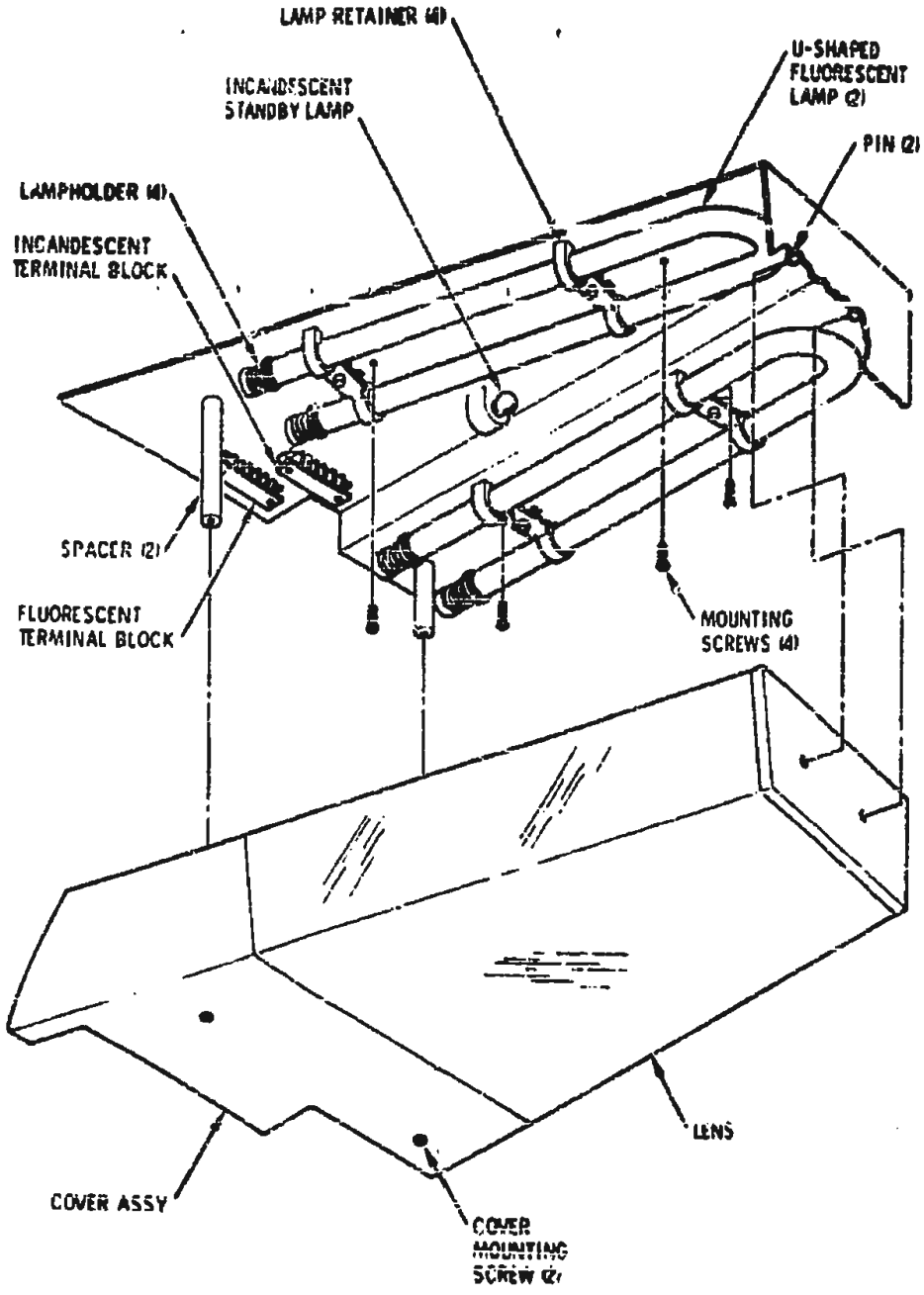
The forward LAVATORIES OCCUPIED sign circuit is different from the aft lavatory sign circuit.

The LAVATORIES portion of the forward LAVATORIES OCCUPIED sign is not lighted until both lavatories are occupied, at which time both the LAVATORIES and the OCCUPIED legends are lighted. In addition, a first class movie-in-use relay inhibits sign operation when the movie is being shown in the first class section.

R Forward and aft LAV LITES override switches (Ref. Fig. 3) are provided to control the fluorescent lavatory lights. Actuating the respective override switch to the BRT position turns on the fluorescent lights in those respective lavatories to bright
R regardless of the lavatory door latch position (Ref. Fig. 3).

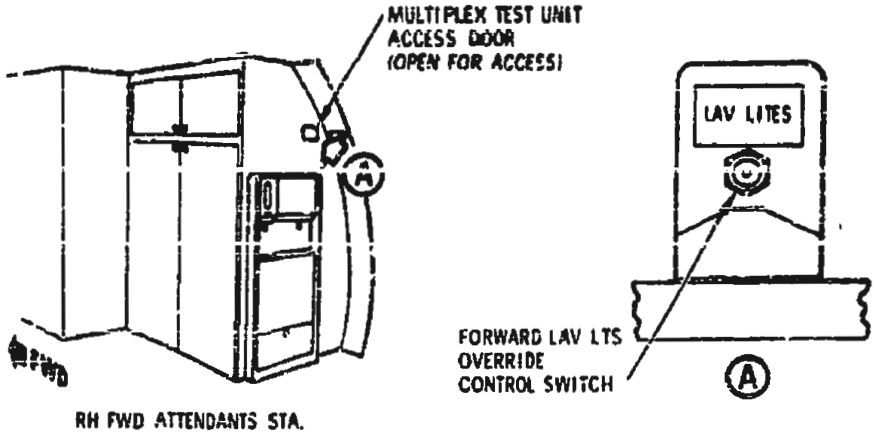


Forward Lavatory Light
Figure 1

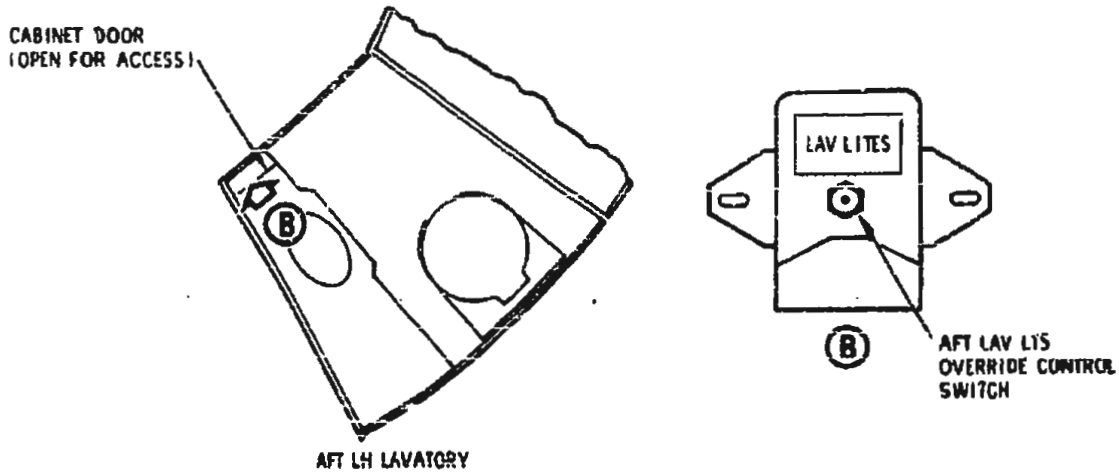


M1-0100-33-001

Aft Lavatory Light
Figure 2



FORWARD LAVATORY LIGHTS OVERRIDE CONTROL SWITCH



AFT LAVATORY LIGHTS OVERRIDE CONTROL SWITCH

MA 31408
M1-0100-33-479

R
R Lavatory Lights Override Control Switches
Figure 3

R # LAVATORY LIGHTING - FAULT ISOLATION

R 1. General

R The electrical schematics in this section can be used when fault
R isolating the lavatory lighting system. Due to the relative
R simplicity of the circuits, no detailed fault isolation
R procedures are provided.

R Refer to the Maintenance Manual Introduction for a more detailed
R discussion of the Fault Isolation Reporting Method (FIRM) and
R use of fault isolation schematics.

R 2. Fault Isolation/Identification

R Table 101 shows the Component Location Index(s) Figure 101 and
R Component Locator Diagram(s) Figure 102 along with electrical
R schematics that can be used when fault isolating the lavatory
R lighting system.

R Figure 101 lists the system components alphabetically with their
R location and access area. Figure 102 is a pictorial reference
R locator.

R Lavatory Lighting
R Table 101

FIGURE	TITLE
101	Component Location Index
102	Component Locator Diagram
SCHEM 1	Lavatory Lighting Schematic

COMPONENT	QTY	AREA/ACCESS	REFERENCE
CIRCUIT BREAKERS:			
DISTR XFMR, AFT LTG – COFFEE BAR LT 3325-CB4	1	GALLEY LT CB PNL	•
LTG LAV AFT 3327-CB5	1	GALLEY LT CB PNL	•
LTG 3329-CB10	1	FESC CB2 PNL K11	•
LTG LAV CONT 3327-CB4	1	GALLEY LT CB PNL	•
LTS LAV CONT AFT 3399-CB5	1	GALLEY RT CB PNL	•
LTS LAV FWD AND GALLEY 3327-CB2	1	PILOT OVHD CB1 PNL L-3	•
SIGNS LAV OCC AFT 3327-CB6	1	GALLEY RT CB PNL	•
SIGNS LAV OCC FWD 3327-CB3	1	GALLEY RT CB PNL	•
LIGHTS LAVATORY:			
AFT LAVS 3327-DS11-DS15	5	OVHD LT FIXTURE	33-27-02
FWD LAVS 3327-DS9-DS10	1	OVHD LT FIXTURE	33-27-01
REACTOR, FWD LAV LT 3327-L1 (1)	1	FWD CAB OVHD ELECT PNL	•
RELAYS:			
AFT LAV LTS CONTROL 3327-K2	1	MESC, 192K/192EA	•
AFT LAV LTS OVERRIDE 3399-K5	1	REAR CAB CLG/273HB/YB	•
AFT LAV OCC SIGNS 3327-K1	1	MESC, 192K	•
CABIN DEPRESS OVRD 3329-K3	1	MESC, 192K	•
FWD LAV LTS CONT 3327-K3	1	FWD CAB CEILING CLOSEOUT PNL	•
FWD LAV LTS OVERRIDE 3399-K4	1	FWD CAB CEILING CLOSEOUT PNL	•
FWD LAV OCC SIGNS 3327-K5	1	FESC, 112AB/211CB	•
FIRST CLASS MOVIE 2334-K1	1	FWD CAB OVHD RELAY PNL	•
SIGNS LAVATORIES OCCUPIED	(2)	CAB CEILING PNLS	33-28-00
SWITCH, LAV DOOR (LT):			
AFT LAVS 3327-S3-S7	5	AFT LAV DOORS	•
FWD LAVS 3327-S1-S2	2	FWD LAV DOORS	•
SWITCHLIGHT – MASTER LAV:			
AFT 3327-DS7	1	AFT ATTENDANT PNL	•
FWD 3327-DS8	1	FWD ATTENDANT PNL	•
SWITCH, LAV LTS OVERRIDE:			
AFT 3399-S7	1	NO. 1 AFT LAV 281-1820	33-27-05
FWD 3399-S6	1	LH FWD LAV 224-348	33-27-05
TRANSFORMER, LAV LTS DISTR 3325-T1	1	MESC, 192K	•

NOTE

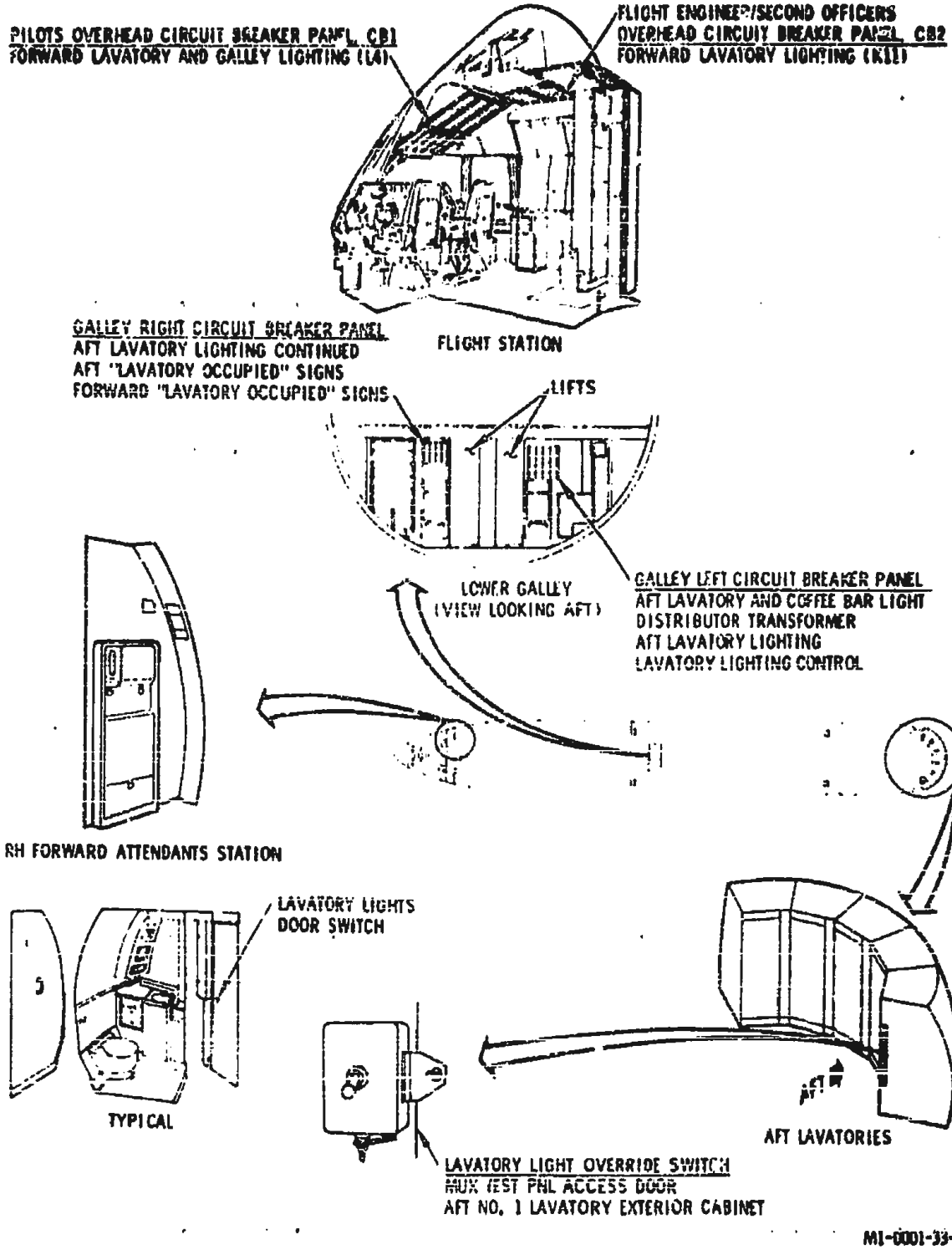
(1) ON AIRCRAFT WITH SB 33-073

(2) REFERENCE FIGURE 1, 102, 33-28-00

*SEE WM EQUIPMENT LIST

M1-0001-33-1420

R Component Location Index
R Figure 101



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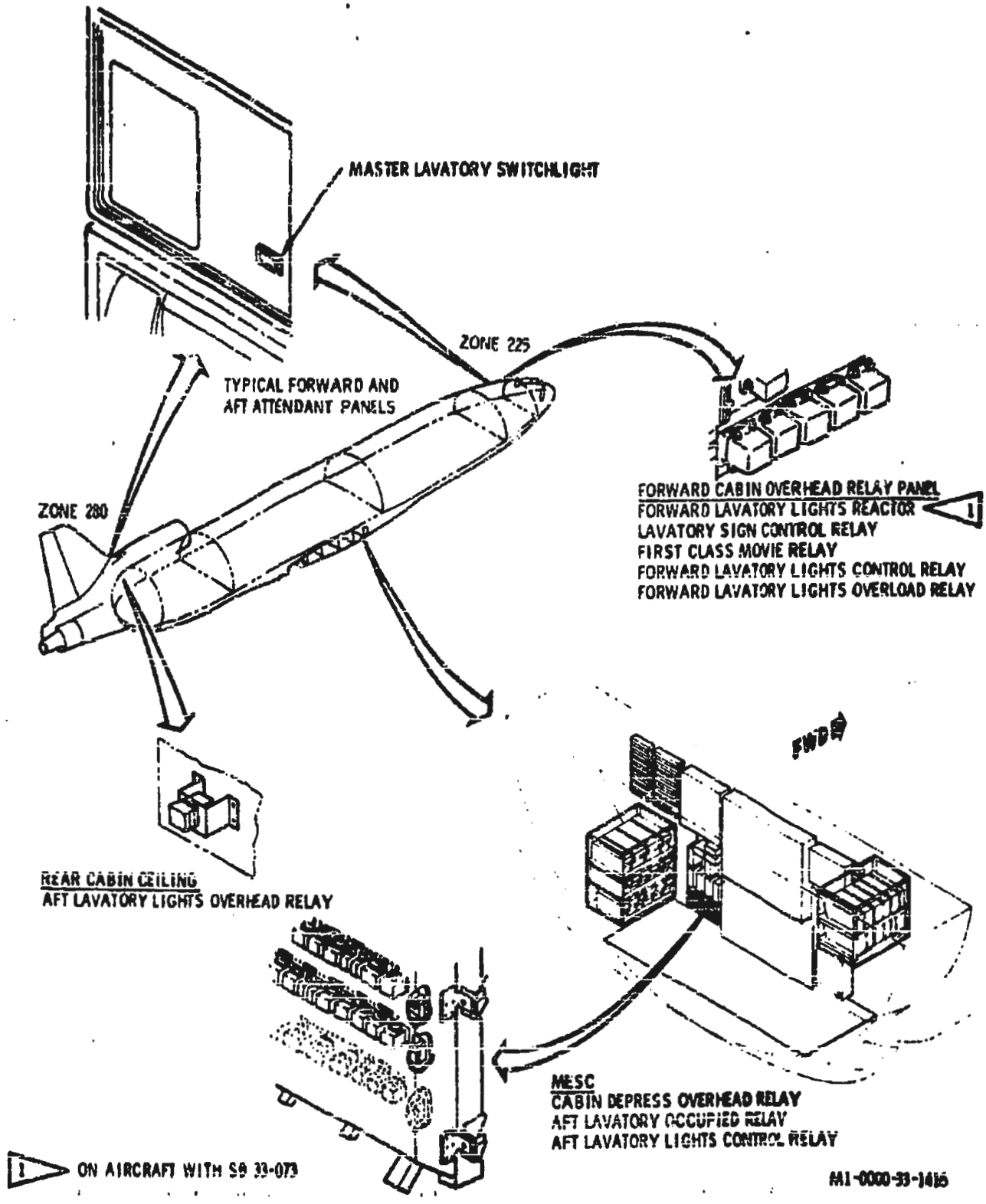
R
R

Component Locator Diagram
Figure 102 (Sheet 1)

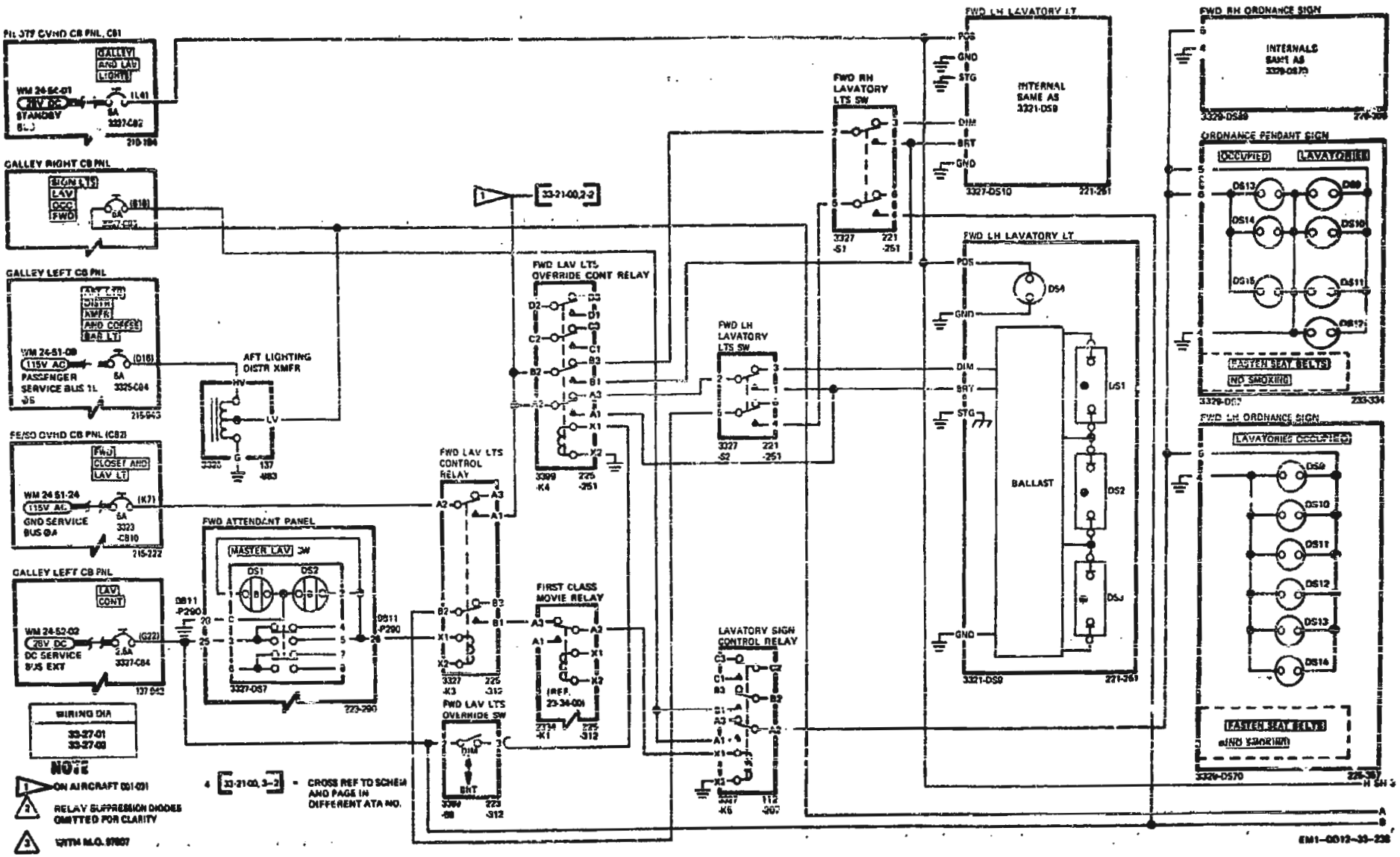
EFFECTIVITY: ALL

001B



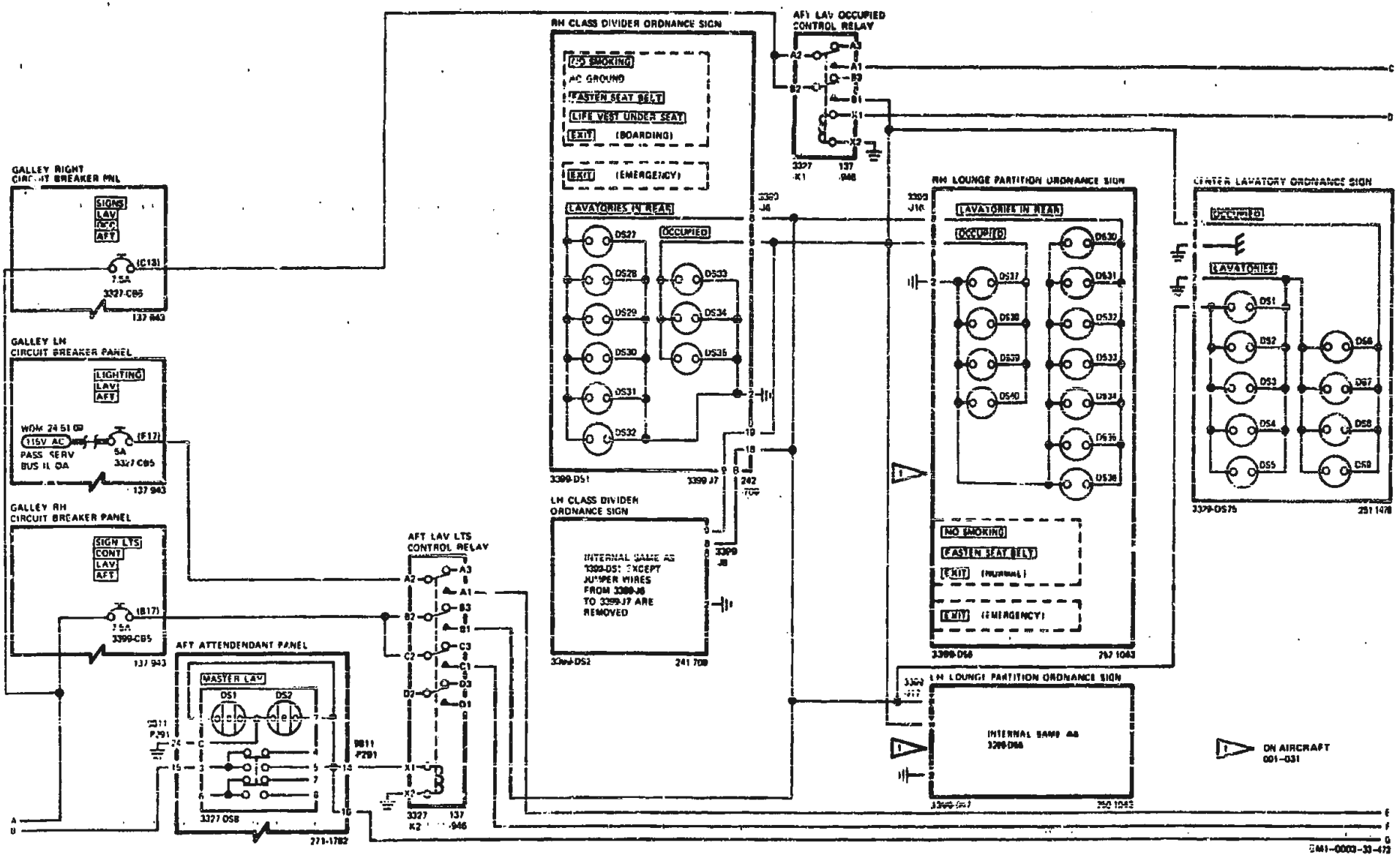
R Component Locator Diagram
R Figure 102 (Sheet 2)

R EFFECTIVITY: ALL
R
001B



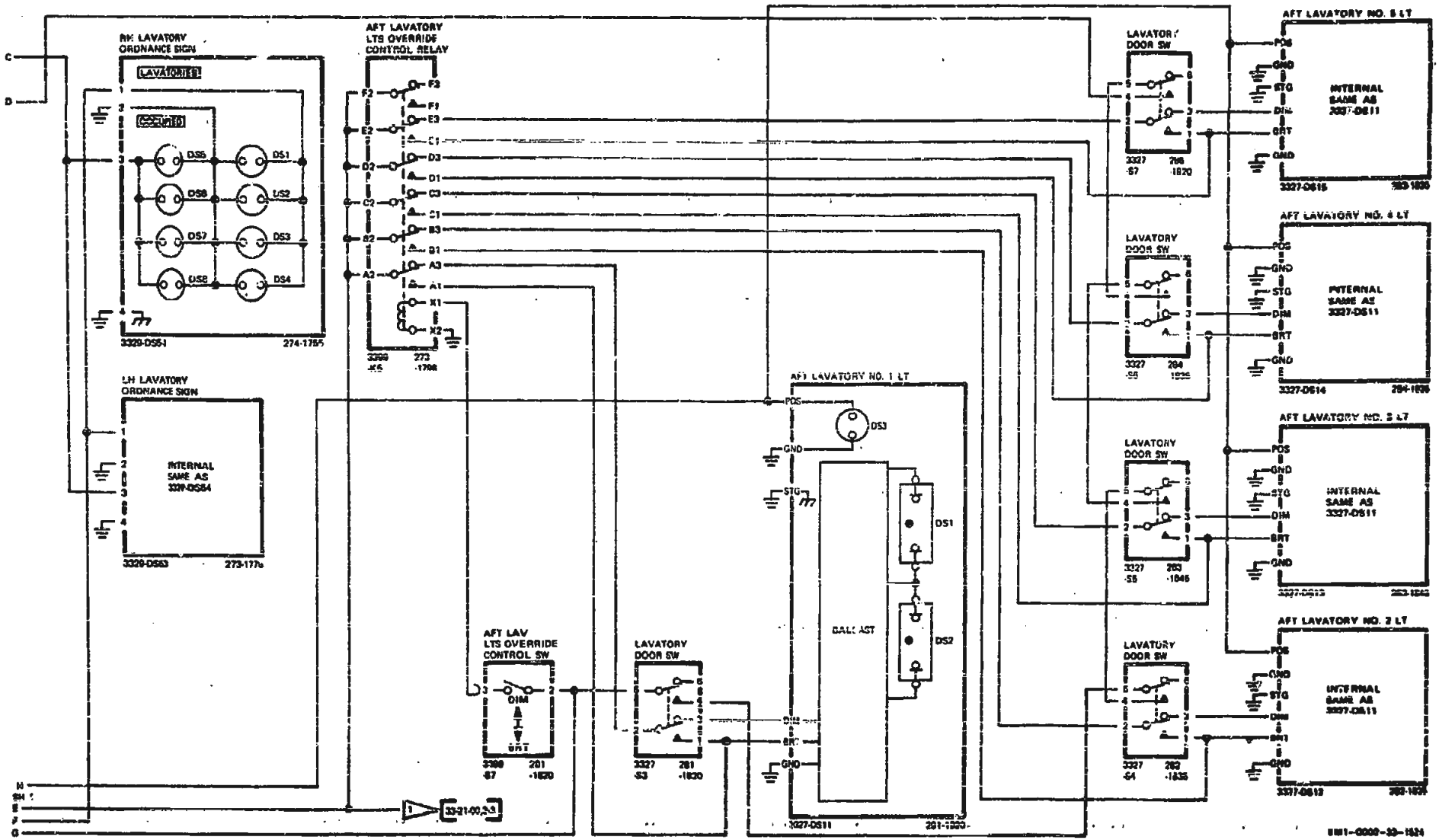
Lavatory Lighting Schematic
SCHEM 1 (Sheet 1)

EFFECTIVITY: ALL



R Lavatory Lighting Schematic
R SCHEM 1 (Sheet 2)

EFFECTIVITY: ALL



CR
CR

Lavatory Lighting Schematic
SCHEM 1 (Sheet 3)

EFFECTIVITY: ALL

001B

LAVATORY LIGHTING - ADJUSTMENT AND TEST

1. Referenced Procedure

24-41-00 External Power/Ground Service System - Maintenance Practices

2. Adjustment/Test

A. Operational Test

(1) Turn on electrical power (Ref. 24-41-00).

R (2) Verify the following circuit breakers are closed:

R (a) On the Pilots Overhead panel C81, MISC - STBY - R GALLEY & LAV LIGHTS (L4).

R (b) On the Flight Engineers/Second Officers overhead R panel CB2, GROUND SERVICE BUS - FWD CLOSET & LAV R LT (K7).

R (c) On the GALLEY LEFT CB panel;

R DC GRD SERV BUS EXT - LIGHTING - LAV CONT

R PASS SERV BUS IL - AFT LTG DISTR XFMR & COFFEE BAR R LT

R PASS SERV BUS IL - LIGHTING LAV AFT

R (c) On the GALLEY Right CB panel;

R SIGNS LAV OCC FWD (16B)

R (d) On the Galley Left CB panel.

R SIGNS LAV OCC AFT (16C)

R LTS CONT LAV - AFT (17B)

(3) On the forward and aft cabin attendant control panels, verify that MASTER LAV switchlight is in the off position.

(4) Inspect all lavatory lighting fixtures, and verify that the standby incandescent light is on in each lavatory.

(5) On the forward and aft cabin attendant panels, energize the MASTER LAV switchlight and verify that the legend MASTER LAV is illuminated on each switchlight.

(6) Inspect the forward and aft lavatory lighting fixtures, and verify that the low-intensity fluorescent light is on in each lavatory.

(7) Verify that the first class, or forward passenger compartment, LAVATORIES OCCUPIED signs are off.

(8) Verify that the LAVATORIES legends on the coach section lavatory occupied signs are on. (LAVATORIES IN REAR on class divider signs will be on).

(9) Actuate the two first class lavatory door switches to the closed position. Verify that the high-intensity fluorescent light comes on in each lavatory. Verify that the first class LAVATORIES OCCUPIED signs light.

(10) Actuate the five coach lavatory door switches to the closed position. Verify that the high-intensity fluorescent light comes on in each lavatory. Verify that each of the coach lavatories occupied signs now has the word OCCUPIED illuminated.

(11) Reset all lavatory door switches to the normal position and verify that the low-intensity fluorescent lights are now on in the lavatories.

(a) Verify that the word OCCUPIED in the coach section and the LAVATORIES OCCUPIED signs in the first class section are off.

(12) On the forward and aft attendant panels, place the MASTER LAV switchlight in the off position, verify that the MASTER LAV legend, and lavatory signs in the coach section, go off.

(13) Place the fwd and aft LAV LITES override switches in the BRT position, andverify that the fluorescent lights in all lavatories go bright.

(14) Place the FWD and AFT LAV LITES override switches in the DIM position. Verify the fluorescent lights in all lavatories go dim.

(15) Turn off electrical power (Ref. 24-41-00).

FORWARD LAVATORY LIGHTING FIXTURE - REMOVAL AND INSTALLATION

1. Referenced Procedure

R 24-00-00 Electrical Power - Maintenance Practices

2. Removal/Installation

A. Removal

(1) On pilots overhead circuit breaker panel CB1, zone 210, open and tag circuit breaker MISC - GALLEY & LAV LIGHTS (L4).

On Flight Engineer/Second Officers overhead circuit breaker panel CB2, zone 215, open and tag circuit breaker GROUND SERVICE BUS - FWD CLOSET AND LAV LT (K11).

(2) Open lavatory upper service module.

(3) Remove hinge pins and service module.

(4) Remove lens by loosening captive screws until lens drops down; slide lens out of hinge pins (Ref. Fig. 401).

(5) Remove and tag wires on fluorescent light terminal block.

(6) Remove and tag wires on incandescent light terminal block.

(7) Remove screws securing lighting fixture to ceiling. Remove fixture.

B. Installation

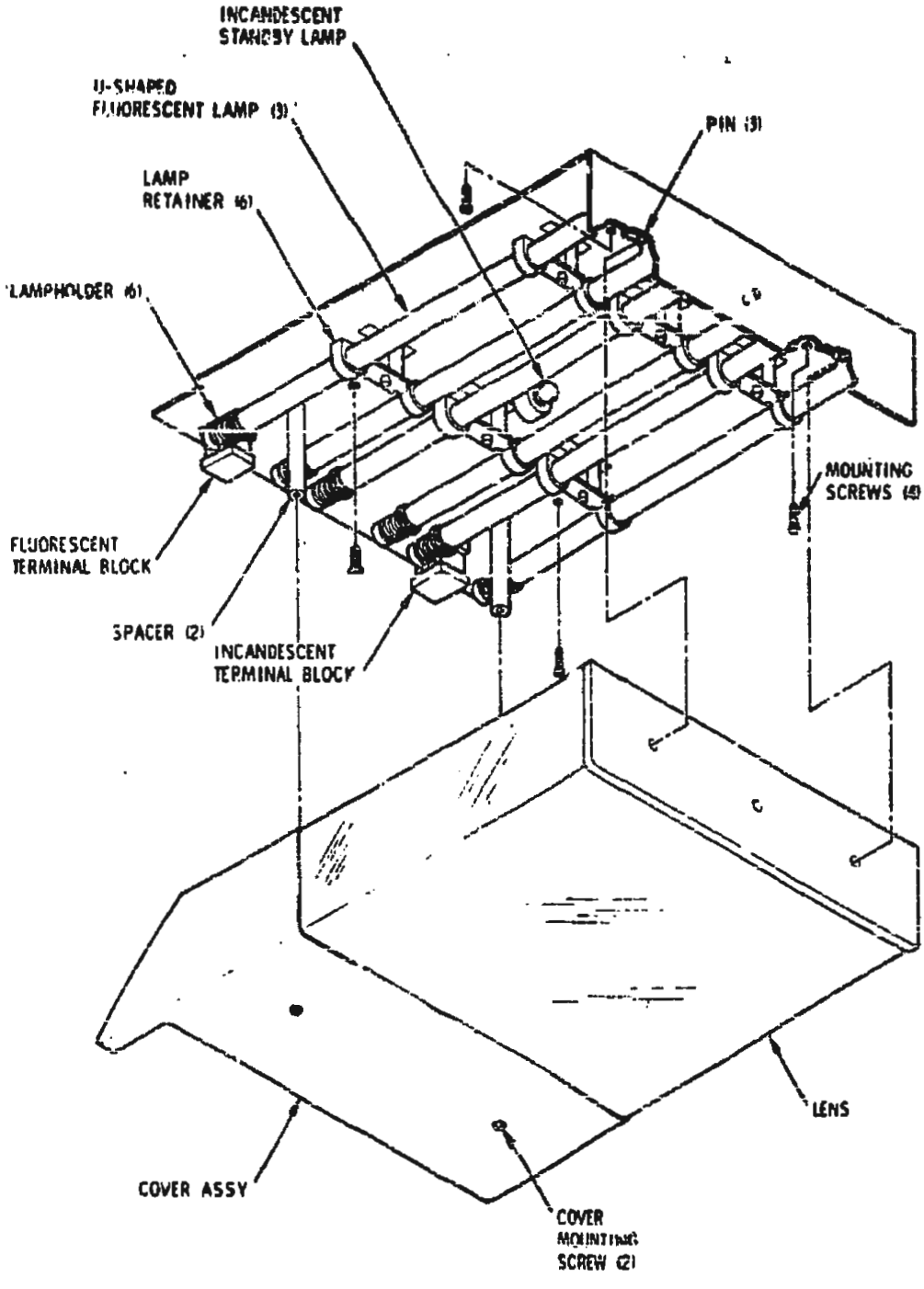
(1) Verify that circuit breakers opened in Step 2A(1) are open and tagged.

(2) Position lavatory lighting fixture against ceiling and secure with screws.

(3) Connect wires to incandescent light terminal block.

(4) Connect wires to fluorescent light terminal block.

(5) Install lens and secure.



Forward Lavatory Lighting Fixture - Removal and Installation
Figure 401

(6) Replace lavatory upper service module.

(7) Remove tags and close circuit breakers opened in Step 2A(1).

3. Relamping

A. Fluorescent Lamp

(1) Verify that lavatory lights are turned off.

(2) Remove lavatory upper service module.

(3) Remove lens.

(4) Remove faulty lamp.

(5) Install replacement lamp.

(6) Turn on electrical power (Ref. 24-00-00).

(7) Turn on lavatory lights to test lamp. Turn lights off after test.

(8) Turn off electrical power (Ref. 24-00-00).

(9) Install and secure lens.

(10) Replace lavatory upper service module.

B. Incandescent Lamp (Standby)

(1) On pilots overhead circuit breaker panel CB1, zone 210, open and tag circuit breaker MISC - GALLEY & LAV LIGHTS (L4).

(2) Remove lavatory upper service module.

(3) Remove lens.

(4) Remove faulty lamp.

(5) Install replacement lamp.

(6) Remove tag and close circuit breaker opened in Step 3B(1).

(7) Turn on electrical power (Ref. 24-00-00) to test lamp.

(8) Turn off electrical power (Ref. 24-00-00).

(9) Install and secure lens.

(10) Replace lavatory upper service module.

AFT LAVATORY LIGHTING FIXTURE - REMOVAL AND INSTALLATION

1. Referenced Procedure

R 24-00-00 Electrical Power - Maintenance Practices

2. Removal/Installation

A. Removal

(1) On pilots overhead circuit breaker panel C81, zone 210, open and tag circuit breaker MISC - GALLEY & LAV LIGHTS (L4).

On galley left circuit breaker panel, zone 130, open and tag the following circuit breakers:

LIGHTING - LAV - AFT

AFT LTG - DISTR XFMR & COFFEE BAR LT

(2) Open lavatory upper service module.

(3) Remove hinge pins and service module.

(4) Remove lens by loosening captive screws until lens drops down; slide lens out of hinge pins (Ref. Fig. 401).

(5) Remove and tag wires on fluorescent light terminal block.

(6) Remove and tag wires on incandescent light terminal block.

(7) Remove screws securing lighting fixture to ceiling. Remove lighting fixture.

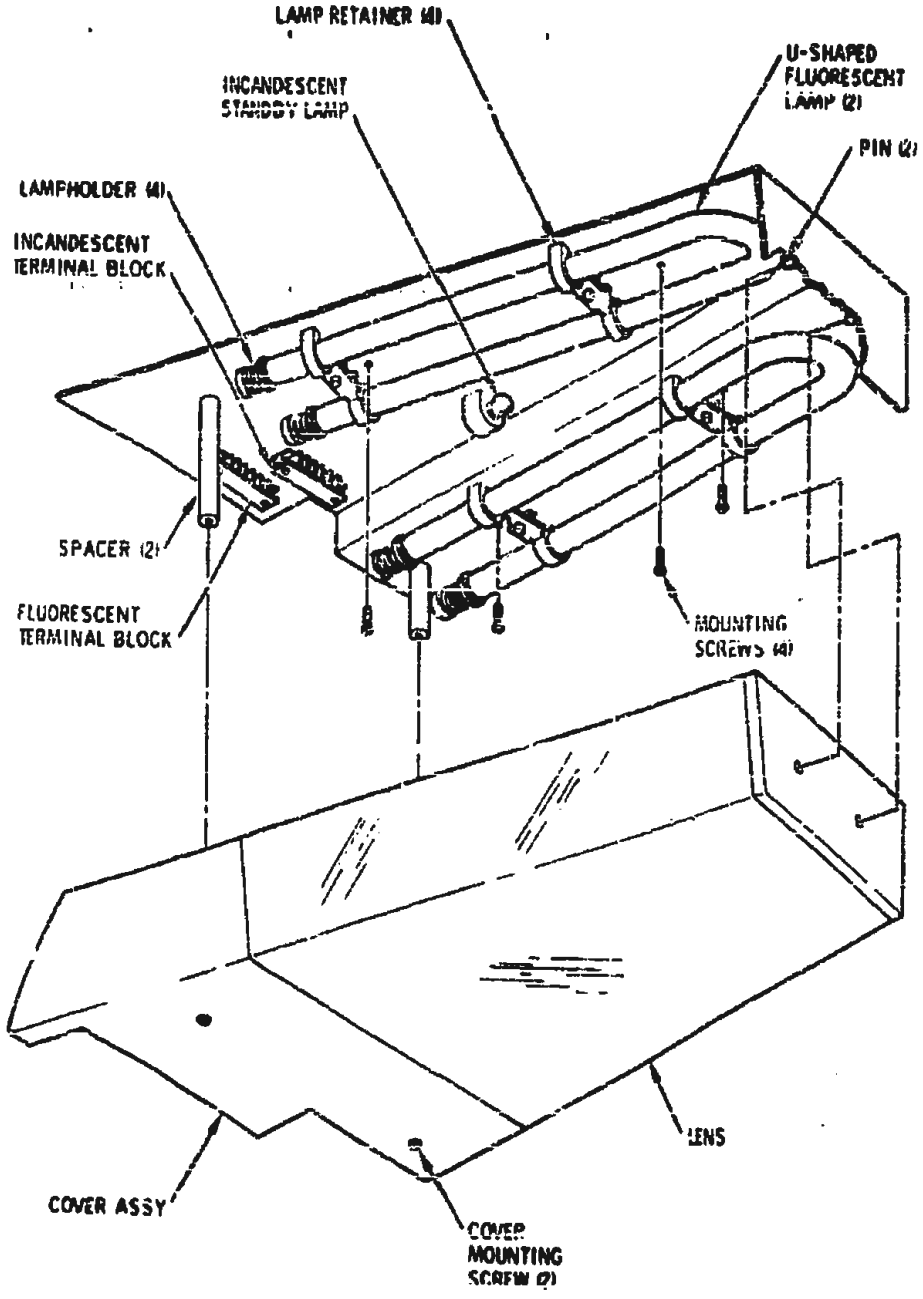
B. Installation

(1) Verify that circuit breakers opened in Step 2A(1) are open and tagged.

(2) Position lavatory lighting fixture against ceiling and secure with screws.

(3) Connect wires to incandescent light terminal block.

(4) Connect wires to fluorescent light terminal block.



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Aft Lavatory Lighting Fixture - Removal and Installation
Figure 401

(5) Install lens and secure screws.

(6) Replace lavatory upper service module.

(7) Remove tags and close circuit breakers opened in Step 2A(1).

R (8) Turn on electrical power (Ref. 24-00-00).

(9) Verify that the incandescent lamp comes on.

(10) With the aft lavatory doors open, place the AFT LAV LITES override switch to the BRT position and verify that the lavatory fluorescent lights come on bright.

(11) Return the AFT LAV LITES override switch to the NORM position and verify that the fluorescent lights return to their previous intensity.

R (12) Turn off electrical power (Ref. 24-00-00).

3. Relamping

A. Fluorescent Lamp

(1) Verify that lavatory lights are turned off.

(2) Remove lavatory upper service module.

(3) Remove lens.

(4) Remove faulty lamp.

(5) Install replacement lamp.

R (6) Turn on electrical power (Ref. 24-00-00).

(7) Turn on lavatory lights to test lamp. Turn lights off after test.

R (8) Turn off electrical power (Ref. 24-00-00).

(9) Install and secure lens.

(10) Replace lavatory upper service module.

B. Incandescent Lamp (Standby)

(1) On pilots overhead circuit breaker panel CB1, zone 210, open and tag circuit breaker MISC - GALLEY & LAV LIGHTS.

(2) Remove lavatory upper service module.

(3) Remove lens.

(4) Remove faulty lamp.

(5) Install replacement lamp.

(6) Remove tag and close cirucit breaker opened in Step 3B(1).

R (7) Turn on electrical power (Ref. 24-00-00) to test lamp.

R (8) Turn off electrical power (Ref. 24-00-00).

(9) Install and secure lens.

(10) Replace lavatory upper service module.

LAVATORY LIGHTS OVERRIDE SWITCH ASSEMBLY - REMOVAL AND INSTALLATION

1. Referenced Procedure

   24-00-00 Electrical Power - Maintenance Practices

2. Removal/Installation

   A. Removal

      (1) Verify following circuit breakers are open and tagged.

         (a) On the Pilots Overhead panel CB1, MISC - STBY - GALLEY & LAV LIGHTS (L4).

         (b) On the Flight Engineers/Second Officers overhead panel CB2, GROUND SERVICE BUS - FWD CLOSET & LAV LT (K11).

R

         (c) On the GALLEY LEFT CB panel;

         DC GRD SERV BUS EXT - LIGHTING - LAV CONT

         PASS SERV BUS IL - LIGHTING LAV AFT

         (c) On the GALLEY Right CB panel;

         LTS CONT LAV - AFT (17B)

      (2) Open access door for applicable override switch assembly (Ref. Fig. 401).

      (3) Release fasteners securing switch assembly.

      (4) Pull switch assembly out to expose wiring connections.

      (5) Disconnect wires from switch and tag wires for installation, remove assembly.

   B. Intallation

      (1) Verify circuit breakers opened in Step 2A(1) and (2) are open and tagged.

      (2) Place switch assembly in position and attach wiring connections to switch.

      (3) Secure switch assembly to panel.

R (4) Remove tags and close circuit breakers opened in Steps
R 2A(1) and (2).

R (5) Turn on electrical power (Ref. 24-41-00).

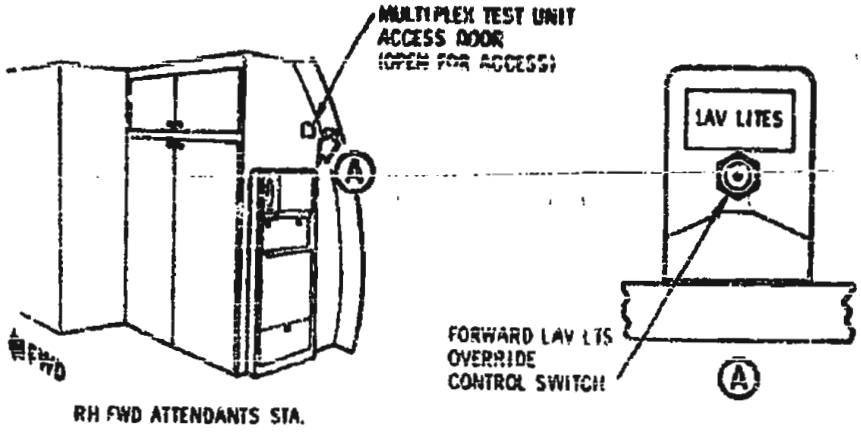
R (6) With applicable lavatory doors open, verify
R incandescent lamp comes on.

R (7) Place lavatory lights override switch in BRT position
R and verify fluorescent lights come on bright.

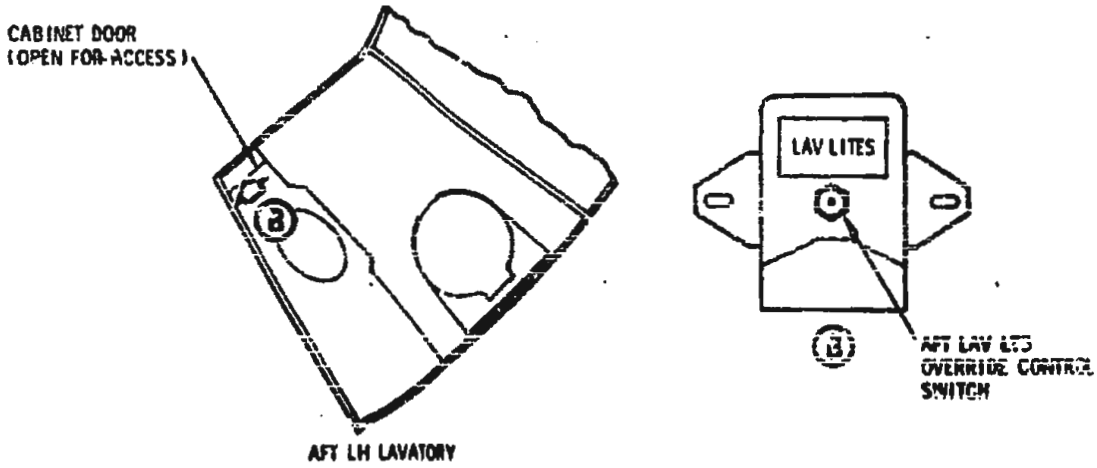
R (8) Place override switch in NORM position and verify
R fluorescent lights dim.

R (9) Close access doors.

R (10) Turn off electrical power (Ref. 24-00-00).



FORWARD LAVATORY LIGHTS OVERRIDE CONTROL SWITCH



AFT LAVATORY LIGHTS OVERRIDE CONTROL SWITCH

Lavatory Light Override Switch Assembly
Figure 401

READING LIGHTING - DESCRIPTION AND OPERATION

1. General

An individual reading light (Ref. Fig. 1) is provided for each passenger seat. The light is located in the passenger service module above the seat, and is controlled by a switch on the passenger control unit (Ref. 23-33-00).

A manual service wand is provided for aiming the light. The wand is also used to adjust the individual air outlets and is stowed in clips on the underside of the first class coat closet shelf.

2. Operation

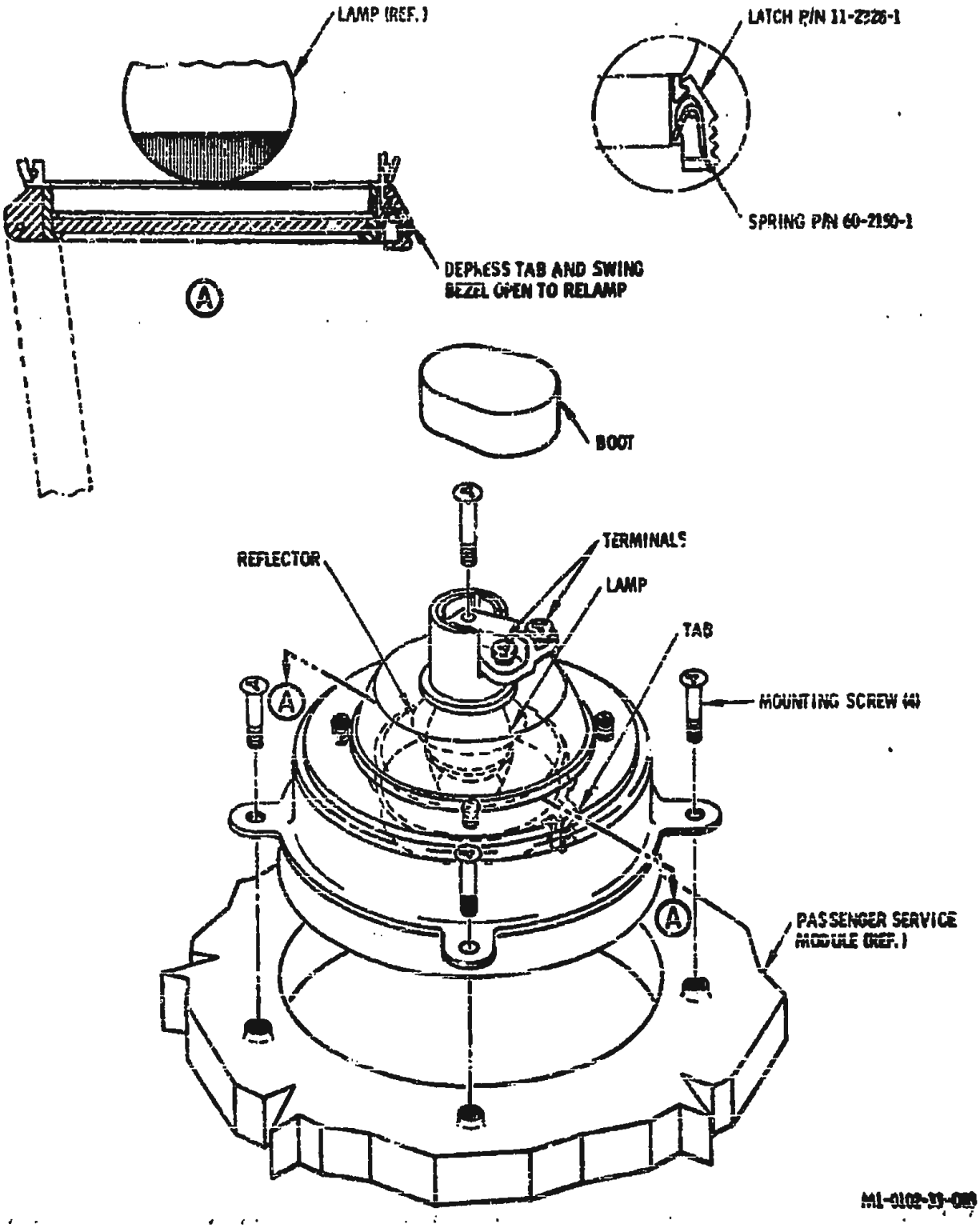
Actuating the light switch on the passenger control unit applies a signal to the seat electronic unit (Ref. Fig. 2). The signal is encoded, then routed through the compartment controller serving the seat and applied to the decoder. The decoder supplies a ground signal to turn on the light (Ref. 23-33-00).

CR 3. Reading Lights Over Carry-On Baggage Racks

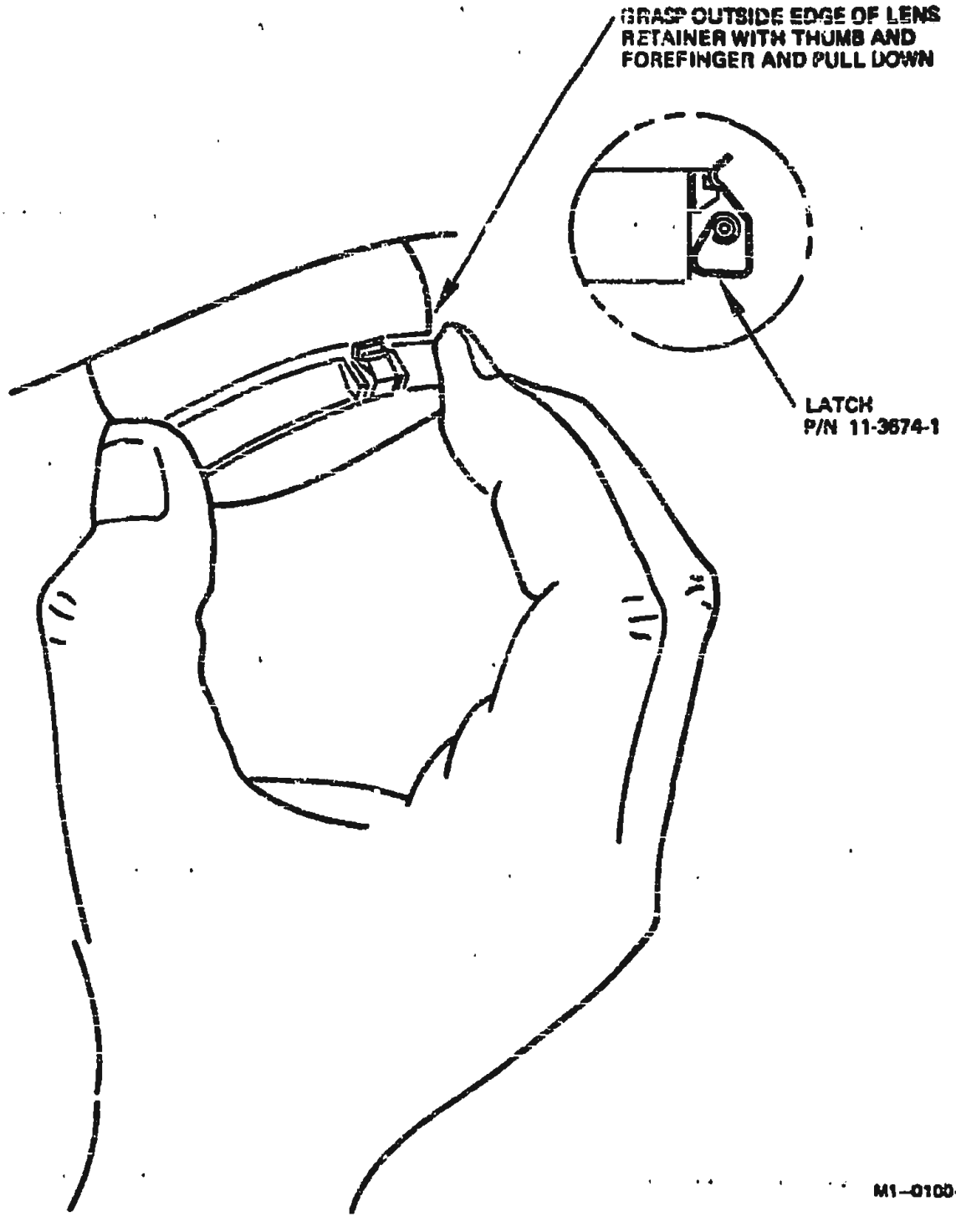
CR A PSM is located over the baggage racks at doors P2R and P3R so
CR that the reading lights may be used to illuminate the counter
CR tops. These lights are controlled by switches located on the
CR baggage racks via the passenger service (MVX) system.

CR 4. Reading Lights Over Aux Bars

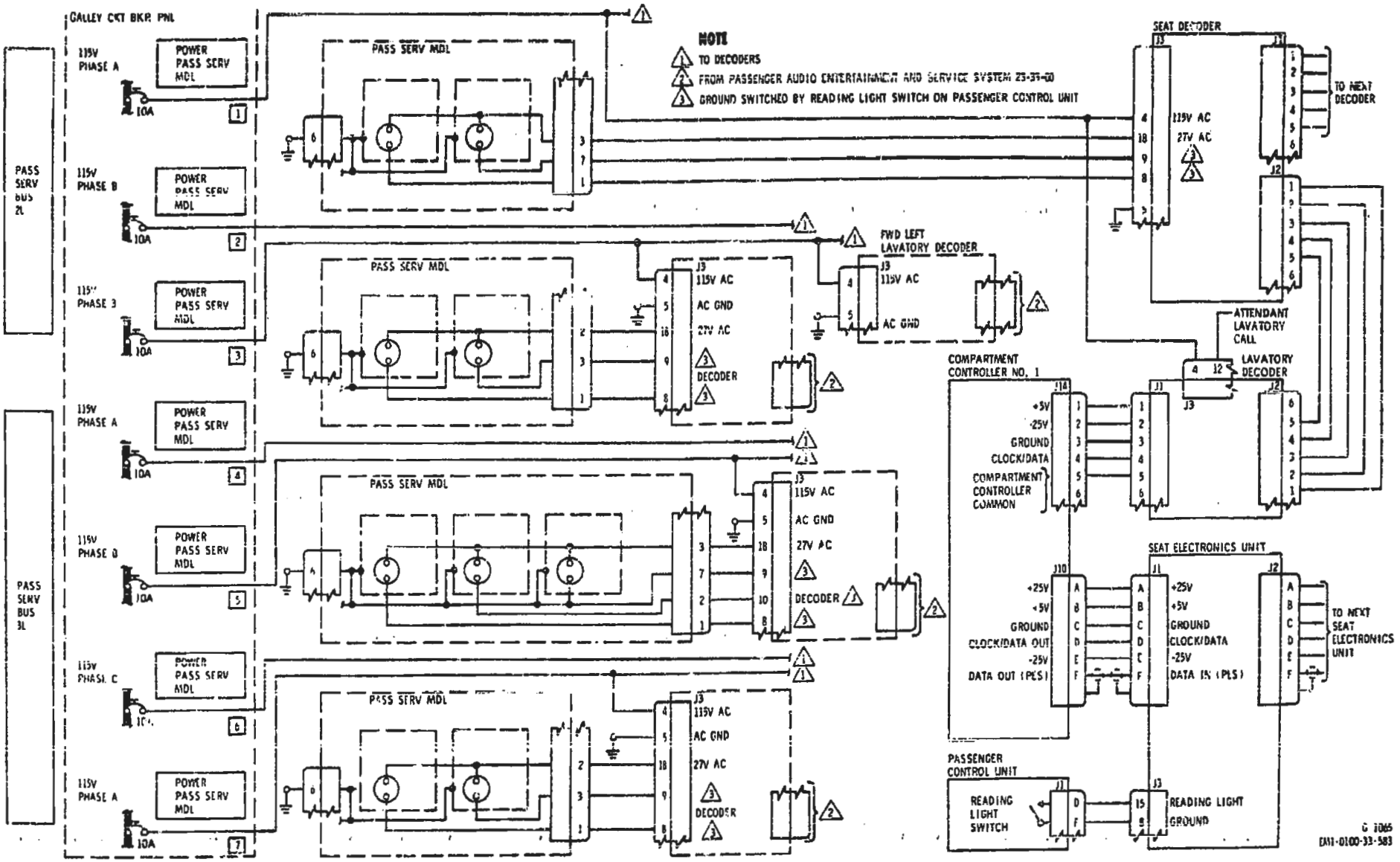
CR A PSM is located over the aux bar at doors P1L, P3L, and P4L so
CR that the reading lights may be used to illuminate the counter
CR tops. These reading lights are controlled by switches installed
CR on the PSM's rather than by the multiplexed passenger service
CR system. A 115/28 volt transformer is installed above the PSM to
CR provide power for the reading light.



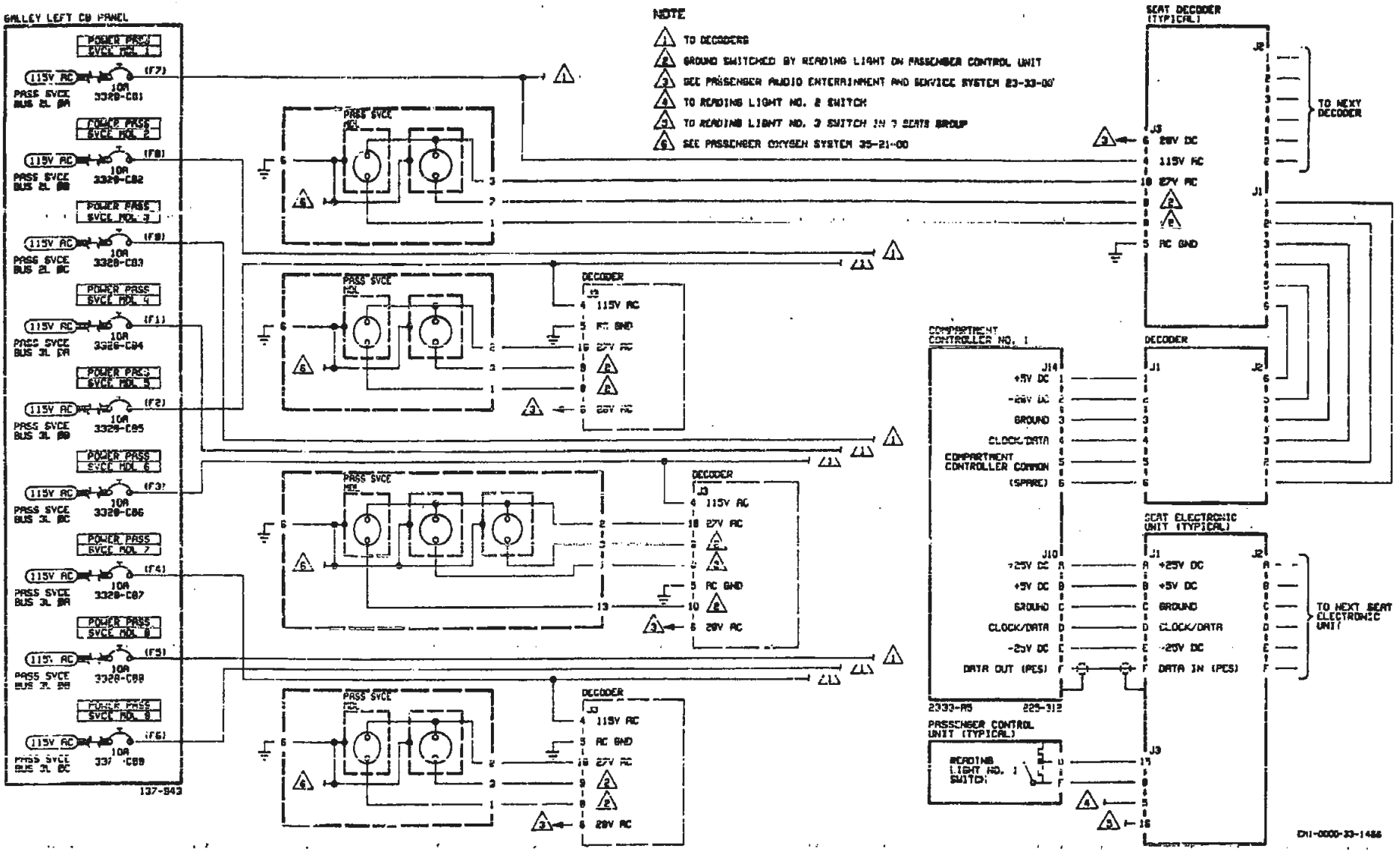
Reading Light (with Grimes lens retainer latch P/N 11-2328-1)
Figure 1



Reading Light (with Grimes lens retainer latch P/N 11-3674-1)
Figure 1



Reading Lights Schematic
Figure 2



Reading Lights Schematic
Figure 2

EFFECTIVITY: 032-999

READING LIGHTING - ADJUSTMENT AND TEST

1. Equipment and Materials

R Aiming and Shutoff Wand, LAS PN 4061029-5

2. Referenced Procedure

R 24-00-00 Electrical Power - Maintenance Practices

3. Adjustment/Test

A. Operational Test

R (1) Turn on electrical power (Ref. 24-00-00).

(2) On aircraft 001-031,
on Flight Engineer/Second Officers overhead circuit breaker panel CB2, zone 215, verify that following circuit breakers are closed:

PASSENGER ENTERTAINMENT - MULTIPLEX SYSTEM (D11)

PASSENGER SERVICE - HOST ADVSY IND (C8)

On galley left circuit breaker panel, zone 130, verify that following circuit breakers are closed:

POWER - PASS SVCE MDL 1 (7F)

POWER - PASS SVCE MDL 2 (8F)

POWER - PASS SVCE MDL 3 (9F)

POWER - PASS SVCE MDL 4 (2F)

POWER - PASS SVCE MDL 5 (3F)

POWER - PASS SVCE MDL 6 (4F)

POWER - PASS SVCE MDL 7 (5F)

POWER - PASS SVCE MDL 8 (6F)

POWER - PASS SVCE MDL 9 (7F)

(2) On aircraft 032-999,
on Flight Engineer/Second Officers overhead circuit

breaker panel CB2, zone 215, verify that following circuit breakers are closed:

PASSENGER SERVICE - MULTIPLEX SYS CC1 & CC4 (D11)

PASSENGER SERVICE - MULTIPLEX SYS CC2 & CC3 (D10)

On galley right circuit breaker panel, zone 130, verify that following circuit breakers are closed:

MULTIPLEX SYSTEM - POWER SUPPLY (4E)

MULTIPLEX COMPT CONT FANS (5F)

On galley left circuit breaker panel, zone 130, verify that following circuit breakers are closed:

POWER - PASS SVCE MDL 1 (7F)

POWER - PASS SVCE MDL 2 (8F)

POWER - PASS SVCE MDL 3 (9F)

POWER - PASS SVCE MDL 4 (1F)

POWER - PASS SVCE MDL 5 (2F)

POWER - PASS SVCE MDL 6 (3F)

POWER - PASS SVCE MDL 7 (4F)

POWER - PASS SVCE MDL 8 (5F)

POWER - PASS SVCE MDL 9 (6F)

NOTE: The following tests are performed on the MULTIPLEXER PSS/PES TEST panel, zone 224.

(3) Momentarily press LAMP TEST pushbutton switch and verify that all lamps on the test panel come on.

(4) Actuate POWER SUPPLY toggle switch to position A and then to position B. Verify that POWER SUPPLY indicator light comes on for position A and position B.

(5) Place call and reading lights rotary switch in READ LT ON position. Verify that all passenger reading lights come on.

(6) Place call and reading lights rotary switch in READ LT OFF position and verify that all passenger reading lights go out.

(7) Place call and reading lights rotary switch in NORM position.

C (8) Check operation of reading lights over auxiliary bars
C by operating manual switches on PSM's.

R (9) Turn off electrical power (Ref. 24-00-00).

B. Adjustment

R (1) Turn on electrical power (Ref. 24-00-00).

(2) Verify that circuit breakers closed in Step 3A(2) are closed.

(3) At MULTIPLEXER PSS/PES TEST panel, zone 224, place call and reading lights rotary switch in READ LT ON position.

(4) Using aiming and shutoff wand, aim reading light so beam falls on central forward section of its associated seat.

NOTE: Extend wand to a convenient working length.

(5) At MULTIPLEXER PSS/PES TEST panel, place call and reading lights rotary switch in NORM position.

R (6) Turn off electrical power (Ref. 24-00-00).

READING LIGHT - REMOVAL AND INSTALLATION

1. Referenced Procedure

24-41-00 External Power/Ground Service System - Maintenance Practices

2. Removal/Installation

A. Removal

(1) On aircraft 001-031, on galley left circuit breaker panel, zone 130, open and tag circuit breakers - Row F - POWER-PASS SVCE MDL 1, 2, 3, 4, 5, 6 and 7.

(1) On aircraft 032-999, on galley left circuit breaker panel, zone 130, open and tag the following circuit breakers:

ROW F - POWER - PASS SVCE MDL - 1, 2, 3, 4, 5, 6, 7, 8, and 9

R (2) On passenger service module, squeeze forward panel support latches together and swing panel downward.

R (3) Squeeze shear pins together and swing passenger service module down.

(4) Remove boot. Disconnect and tag wires (Ref. Fig. 401).

(5) Remove screws securing reading light to passenger service module. Remove reading light.

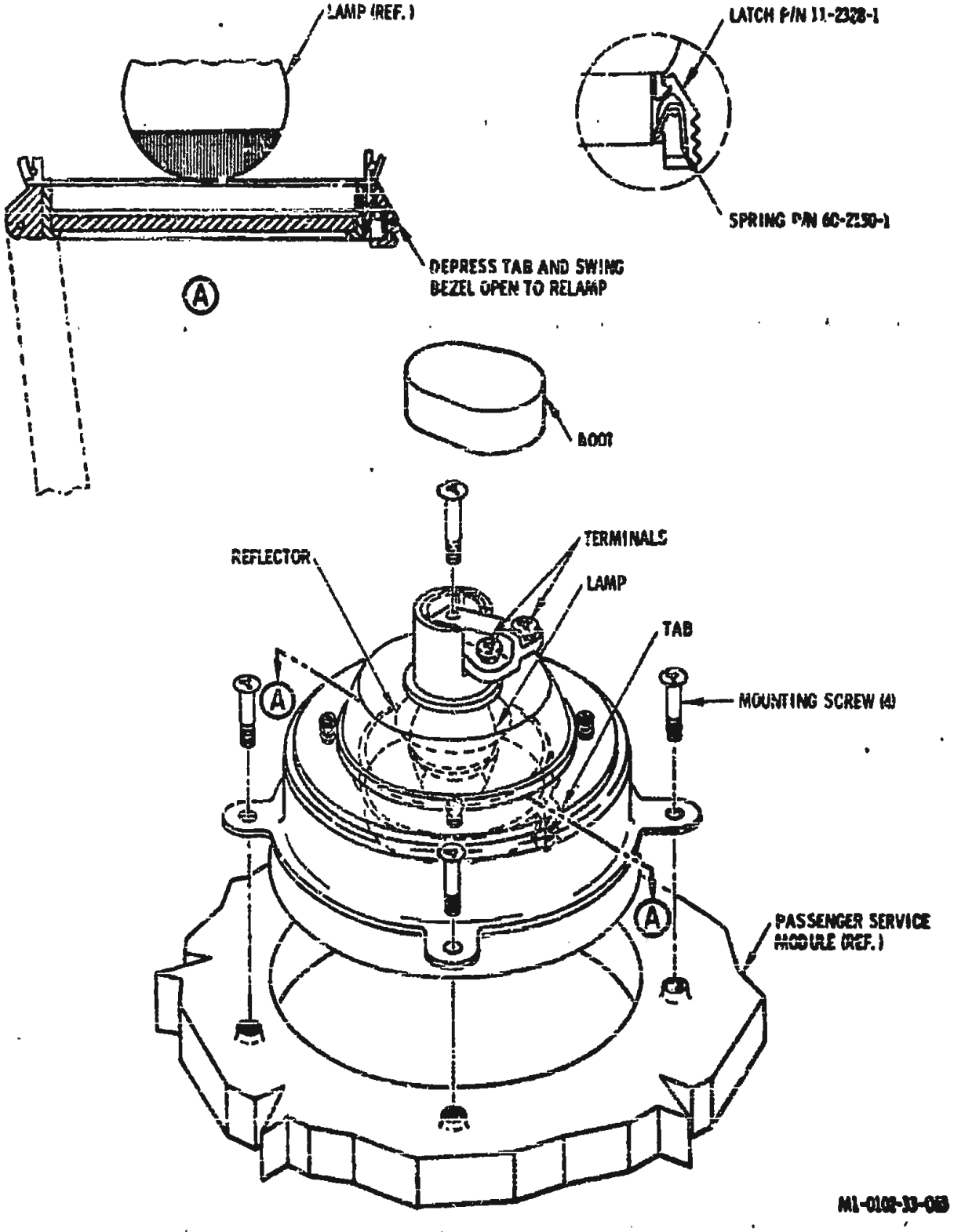
B. Installation

C C C C C NOTE: Outboard reading light assemblies (LH & RH) Mfr P/N 10-0456-( ) are not stocked. When it is necessary to replace an outboard reading light assembly, rework an inboard light assembly (Mfr P/N 10-0457-( )) per instructions in paragraph 4 of this procedure.

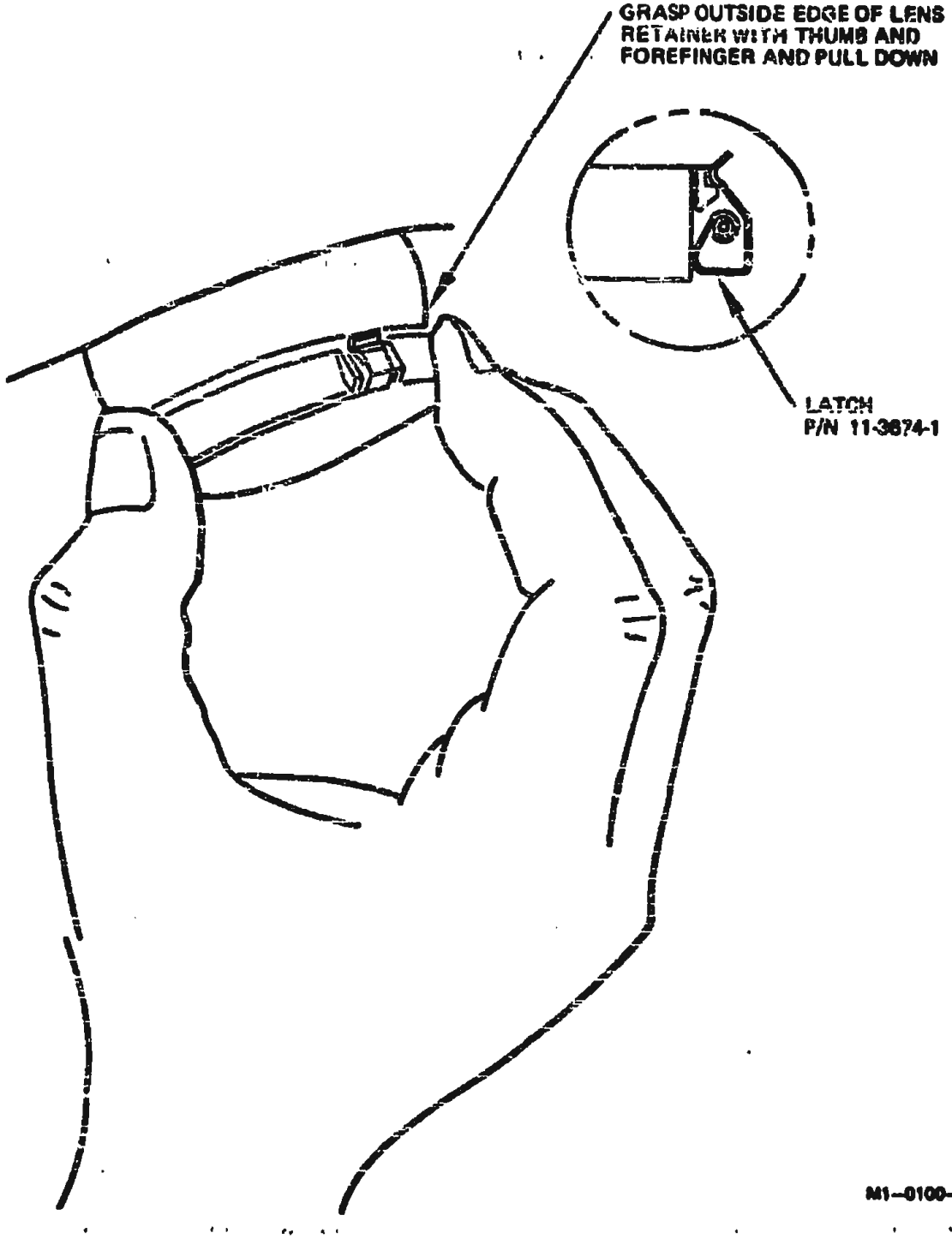
R (1) Verify circuit breakers opened in Step 2A(1) are open and tagged.

(2) Secure reading light to passenger service module with screws.

(3) Connect wires and install boot.



Reading Light (with Grimes Lens Retainer Latch P/N 11-2328-1)
Removal and Installation
Figure 401



Reading Light (with Grimes Lens Retainer Latch P/N 11-3674-1)
Removal and Installation
Figure 401

R (4) Squeeze shear pins together and swing passenger service module up into position. Release shear pins so they engage track.

R (5) Squeeze latches together and swing forward panel up into position. Release latches so they engage track.

(6) Remove tags and close circuit breakers opened in Step 2A(1).

3. Relamping

A. Reading Light

R (1) Verify reading light is turned off.

R (2) On aircraft with Grimes lens retainer latch P/N 11-2328-1, depress tab on reading light and swing bezel open (Ref. Fig. 401, Page 402).

R (2) On aircraft with Grimes lens retainer latch P/N 11-3674-1, grasp outside edge of reading light retainer with thumb and forefinger and pull down (Ref. Fig. 401, Page 403).

(3) Remove faulty lamp.

(4) Install new lamp.

(5) Turn on electrical power (Ref. 24-41-00).

(6) Turn on reading light to test lamp. Turn light off after test.

(7) Turn off electrical power (Ref. 24-41-00).

(8) Close bezel.

C 4. Rework of Inboard Reading Light Assembly to Fit Outboard Position

C A. Order out and inboard light assembly (Mfr P/N 10-0457-( ).

C B. Remove the 11-1899-1 bracket and install a 11-1929-1 bracket in its place. The unit is now an outboard light assembly Mfr P/N 10-0456-( ).

C C. Install the Mfr P/N 11-1899-1 bracket on failed light assembly and forward to salvage.

CR 5. Reading light latch replacement (latch PN 11-2328-1)

CR A. Equipment

CR (1) Lens/latch pin removal/installation tool PN
CR 33-28-01-001.

CR B. Latch removal

CR (1) Remove reading light per 33-28-01 2.A. removal
CR instructions.

CR (2) Using tool No. 33-28-01-001 remove latch pin (Ref. Fig.
CR 401). Save pin and spring for reinstallation.

CR C. Latch installation

CR (1) Using tool No. 33-28-01-001 install serviceable pin,
CR spring and latch.

CR (2) Reinstall reading light per 33-28-01 2.B. installation
CR instructions.

CR D. Perform reading light operational check.

SIGN LIGHTING - DESCRIPTION AND OPERATION

NOTE: For movement of Class Divider Partition, refer to 25-25-09

Movable Class Divider Partition/Removal and Installation

1. General

The following illuminated signs are installed in the passenger compartment, galley, and lavatories for passenger information (Ref. Fig. 1):

EXIT

NO SMOKING/FASTEN SEAT BELT

Lavatory RETURN TO CABIN

LAVATORIES OCCUPIED

2. Door EXIT and EXIT locator Signs

A. Description and Operation

R A lighted EXIT sign is installed in the side trimpanel at each of the passenger entry doors (Ref. Fig. 2). An EXIT locator sign is installed inboard of each door. The forward and aft EXIT locator signs are header-mounted (Ref. Fig. 3). The mid cabin signs are pendant-mounted signs suspended from the ceiling (Ref. Fig. 4). The passenger call system indicator lights are mounted on the underside of the EXIT locator lights (Ref. 33-26-00). Normal and emergency EXIT legends are also incorporated on the two class divider signs.

The EXIT signs can be lighted by either normal power or emergency power (Ref. 33-51-00). Normal power is provided by a 115/28V ac stepdown transformer energized by depressing the NO SMOKING switchlight on the eyebrow panel, zone 210. (Ref. Fig. 5).

3. Ordinance Signs

A. Description

NO SMOKING and FASTEN SEAT BELT legends are incorporated on the following ordinance signs:

Cabin attendant signs (Ref. Fig. 6)

Pendant mounted signs (Ref. Fig. 7)

2 Class divider ordinance signs (Ref. Fig. 8)

B. Operation

The NO SMOKING and FASTEN SEAT BELT ordinance signs are normally controlled manually by separate switchlights on the eyebrow panel (Ref. Fig. 9). The signs are automatically energized by aneroid switches in the passenger oxygen controller when cabin pressure is lost (Ref. 35-21-00).

The signs are energized through secondary circuit breakers which are powered by 115/28V ac stepdown transformers. When the signs are turned on, a chime sounds to alert the attendants. The signs flash on and off for 15 seconds, then stay on.

4. Lavatory RETURN TO CABIN Signs

A. Description and Operation

A RETURN TO CABIN sign in each lavatory comes on, without flashing, when the FASTEN SEAT BELTS switchlight on the eyebrow panel is depressed (Ref. Fig. 9). The signs are energized through secondary circuit breakers powered by a 115/28V ac stepdown transformer.

5. LAVATORIES OCCUPIED Signs

A. Description and Operation

LAVATORIES OCCUPIED legends are incorporated on the following :

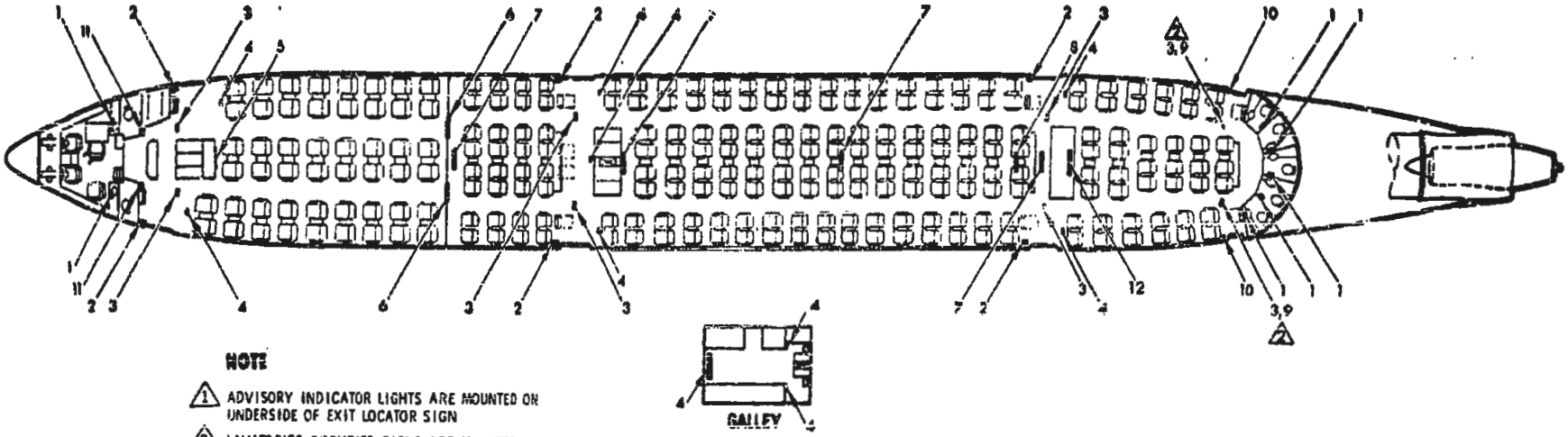
forward pendant ordinance signs

2 class divider ordinance signs (Ref. Fig. 8)

2 Aft lounge class divider signs (aircraft 001-031)

2 aft header LAVATORIES OCCUPIED signs (Ref. Fig. 10)

Sign operation is described in 33-27-00.



NOTE

1. ADVISORY INDICATOR LIGHTS ARE MOUNTED ON UNDERSIDE OF EXIT LOCATOR SIGN
2. LAVATORIES OCCUPIED SIGNS ARE MOUNTED ABOVE AFT EXIT LOCATOR SIGNS

INDEX NO.	SIGN	INDEX NO.	SIGN	INDEX NO.	SIGN
1	RETURN TO CABIN	5	NO SMOKING LAVATORIES OCCUPIED FASTEN SEAT BELT	9	LAVATORIES OCCUPIED
2	EXIT	6	NO SMOKING FASTEN SEAT BELT LAVATORIES IN REAR OCCUPIED EXIT	10	EXIT
3	EXIT	7	NO SMOKING FASTEN SEAT BELT	11	LAVATORIES OCCUPIED NO SMOKING FASTEN SEAT BELT
4	NO SMOKING FASTEN SEAT BELT	8	LAVATORIES OCCUPIED	12	

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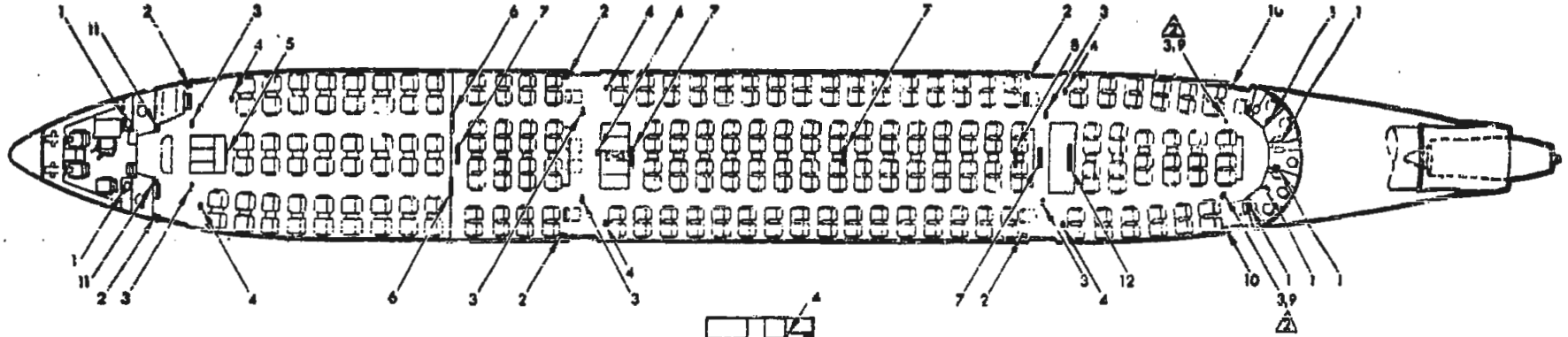
CR Illuminated Sign Locations
CR Figure 1



GALLEY

NOTE

⚠1 ADVISORY INDICATOR LIGHTS ARE MOUNTED ON UNDERSIDE OF EXIT LOCATOR SIGN

⚠2 LAVATORIES OCCUPIED SIGNS ARE MOUNTED ABOVE AFT EXIT LOCATOR SIGNS

INDEX NO.	SIGN	INDEX NO.	SIGN	INDEX NO.	SIGN
1	RETURN TO SEAT	5	NO SMOKING · LAVATORIES OCCUPIED · FASTEN SEAT BELT	9	⚠2 LAVATORIES OCCUPIED
2	EXIT	6	NO SMOKING · LAVATORIES IN REAR OCCUPIED · FASTEN SEAT BELT · CURTAIN SHALL BE OPEN FOR TAKE OFF & LANDING · FIRST CLASS CABIN FORWARD · EXIT	10	EXIT
3	⚠1 EXIT	7	NO SMOKING · FASTEN SEAT BELT	11	NO SMOKING · LAVATORIES OCCUPIED · FASTEN SEAT BELT
4		8	LAVATORIES OCCUPIED	12	

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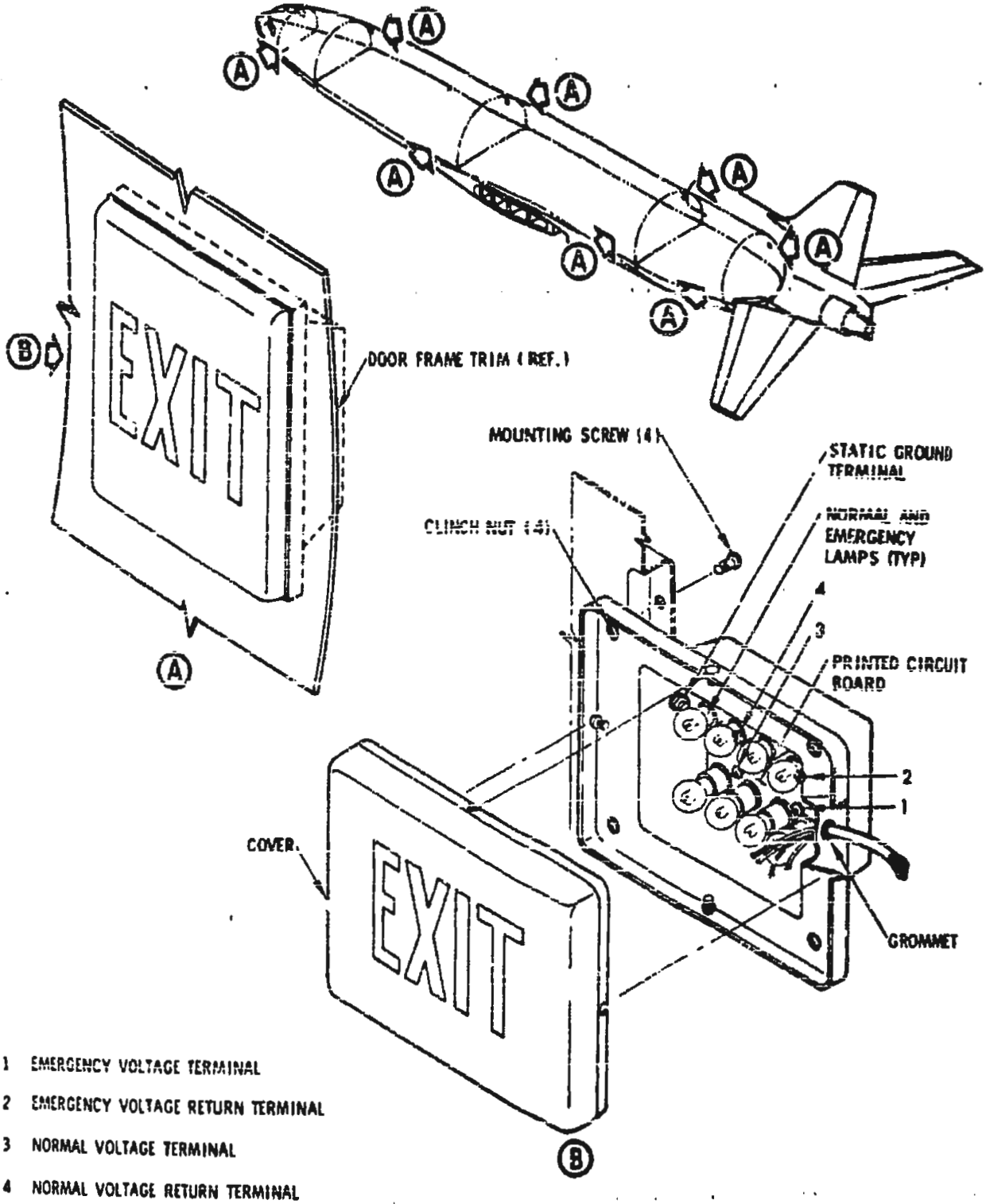
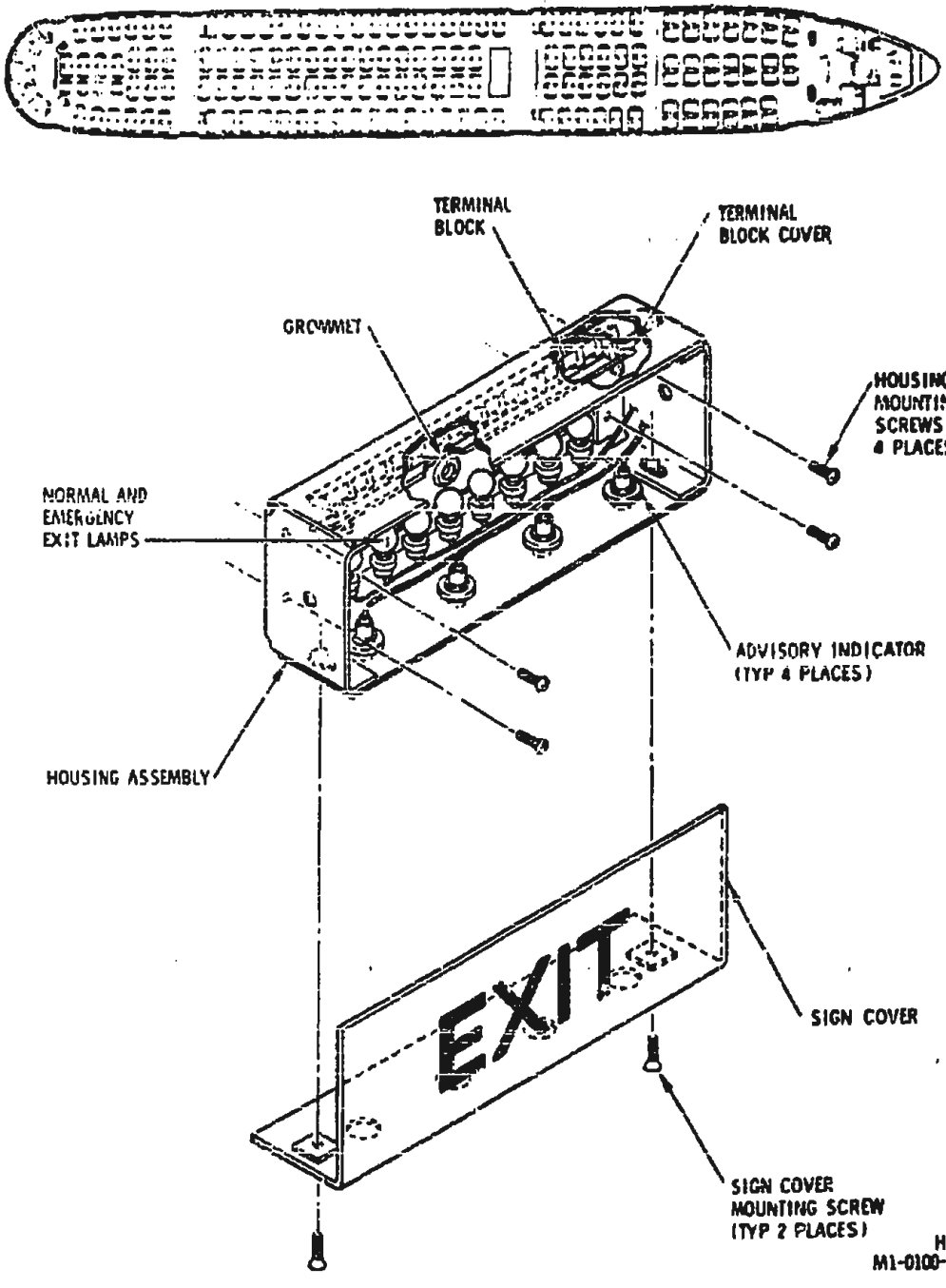
CR
CR

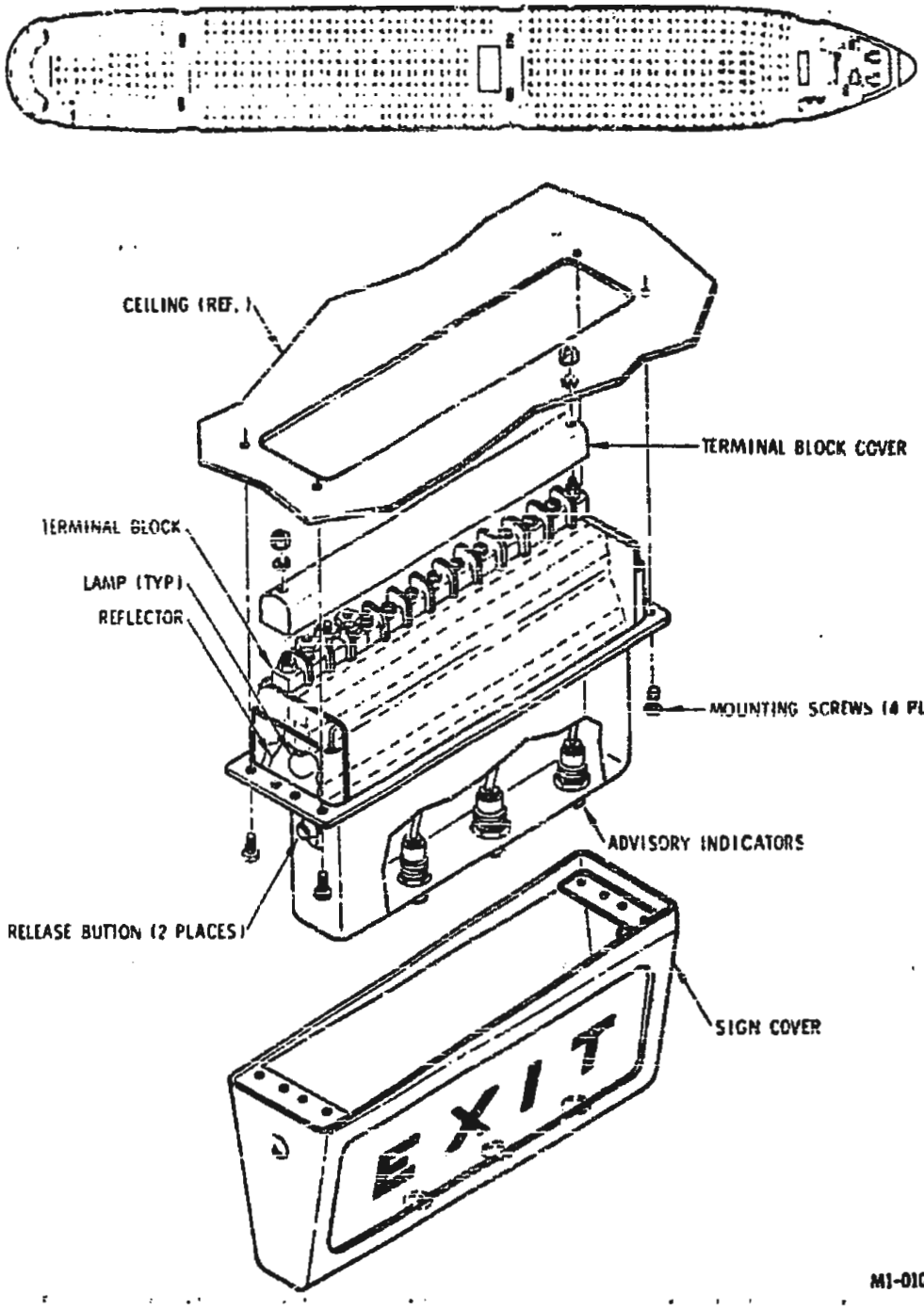
Illuminated Sign Locations
Figure 1



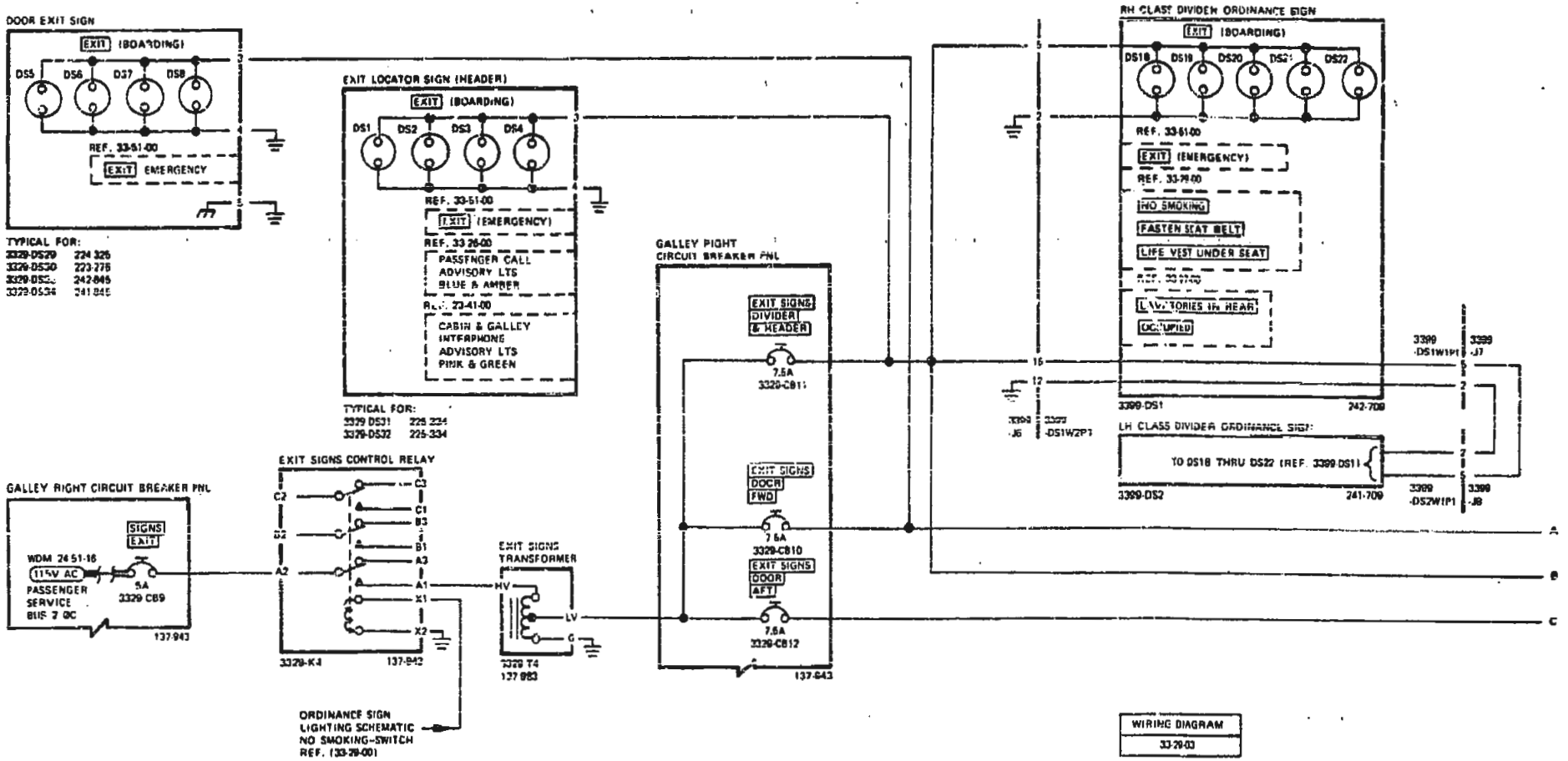
Door EXIT Sign
Figure 2



Header Mounted EXIT Locator Sign
Figure 3



Pendant-Mounted EXIT Locator Sign
Figure 4



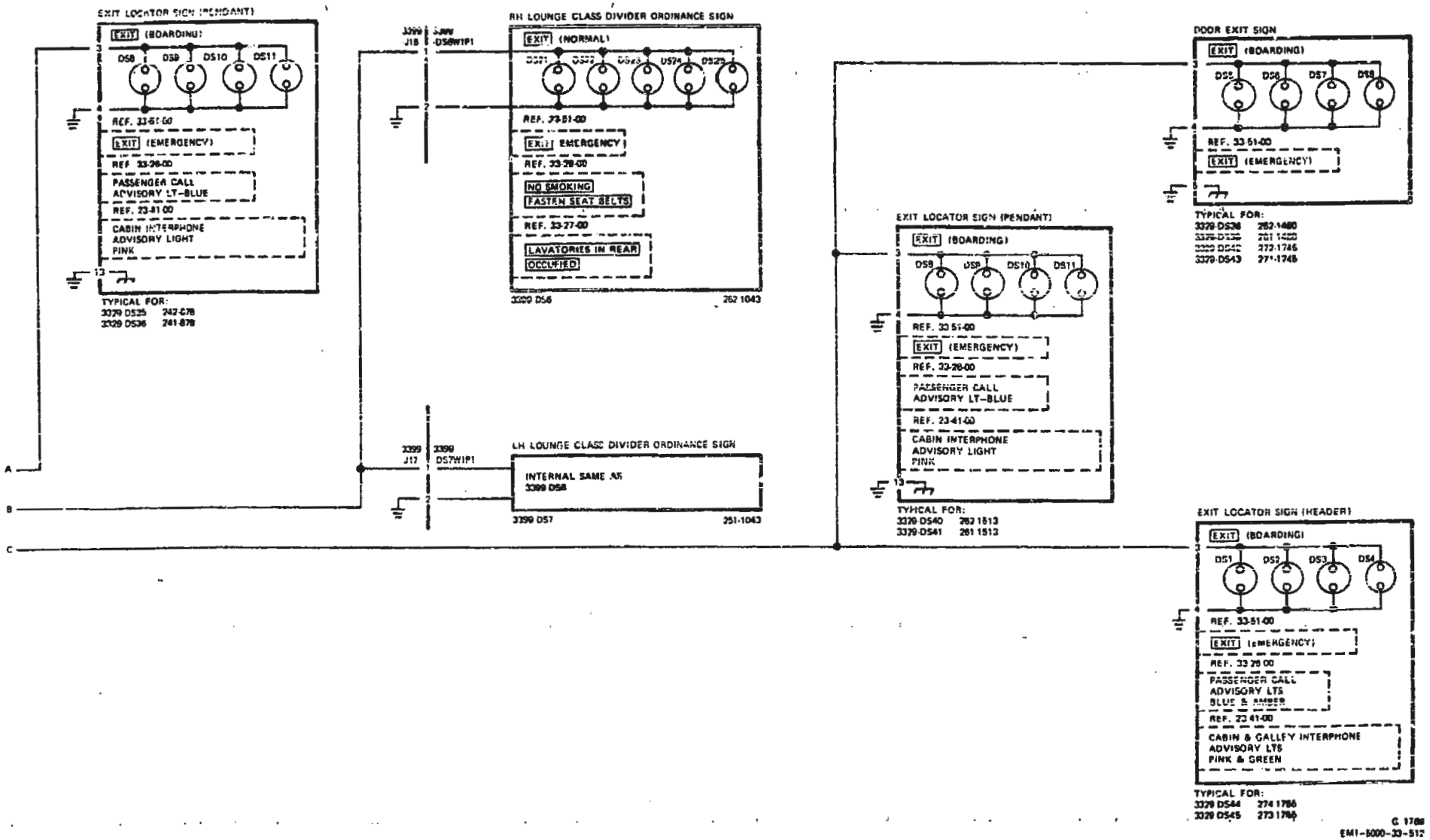
NOTE

1 RELAY SUPPRESSION DIODES OMITTED FOR CLARITY

EM1-80(*)-33-011

EXIT Sign Lighting Schemetic
Figure 5 (Sheet 1)

R
R
001B EFFECTIVITY: ALL



EXIT Sign Lighting Schematic
Figure 5 (Sheet 2)

R
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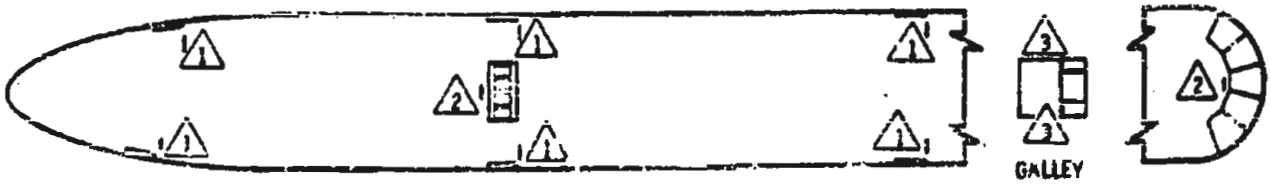
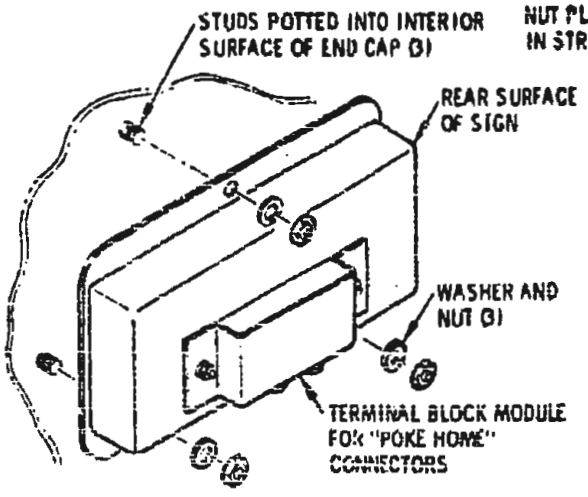
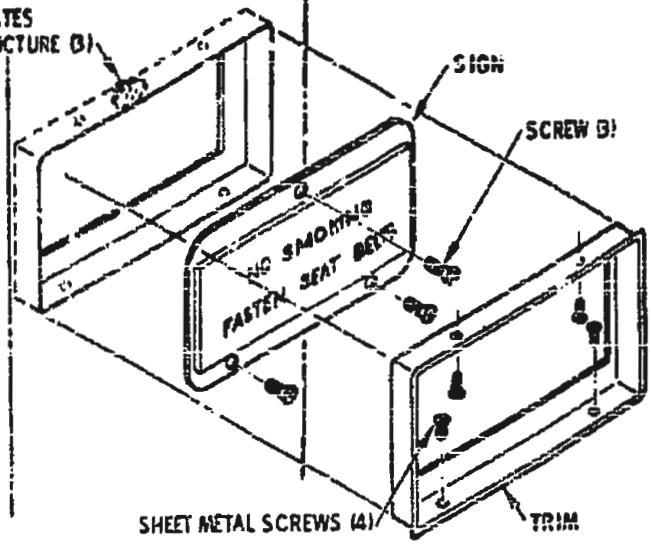
001B EFFECTIVITY: ALL



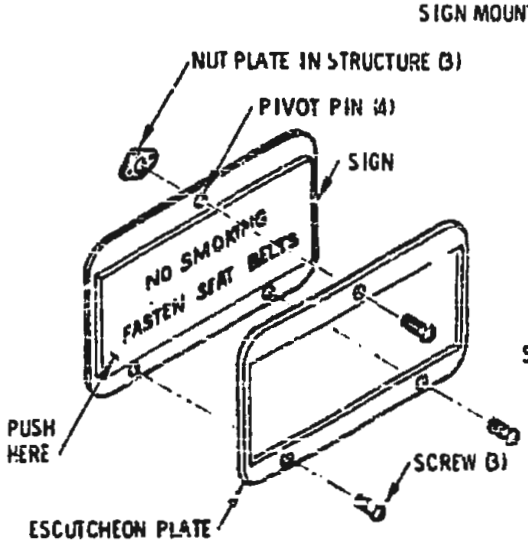

STUDS POTTED INTO INTERIOR SURFACE OF END CAP (3)
REAR SURFACE OF SIGN
WASHER AND NUT (3)
TERMINAL BLOCK MODULE FOR "POKE HOME" CONNECTORS

INSTALLATION 1 STOWAGE CABINET END CAP SIGN INSTALLATION

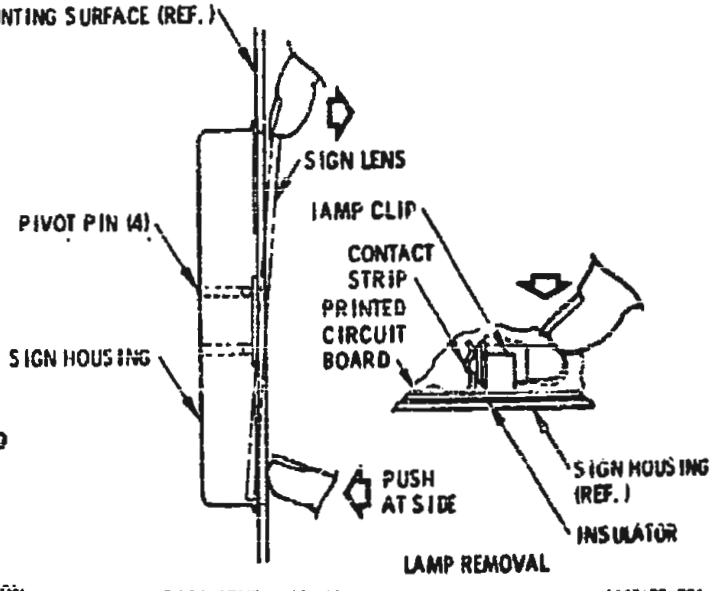
VIEW LOOKING AT REAR OF SIGN (INSIDE STOWAGE CABINET)



INSTALLATION 2 LIFT CONTROL PANEL SIGN INSTALLATION



INSTALLATION 3 GALLEY SIGN INSTALLATION



SIGN LENS REMOVAL TOP VIEW

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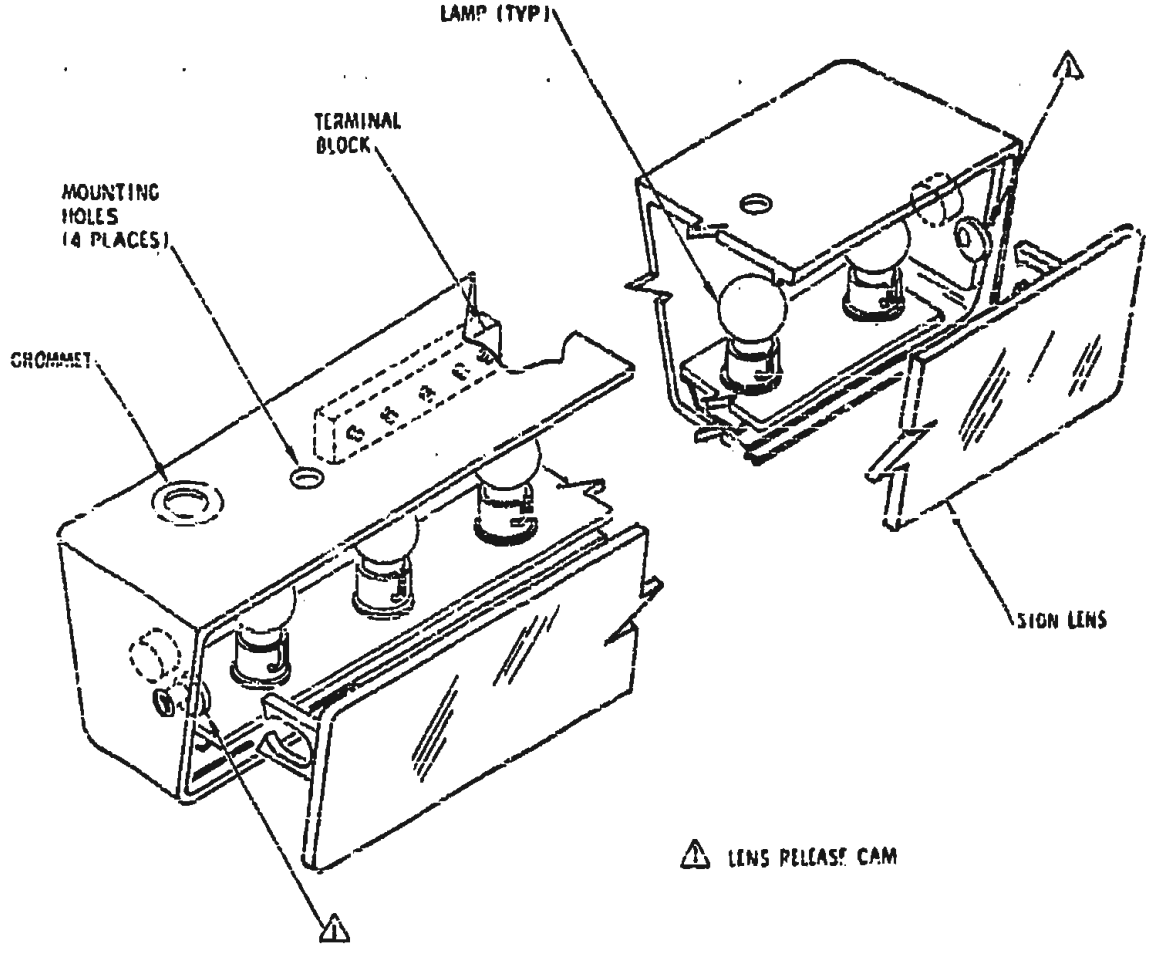
Cabin Attendant Ordinance Sign
Figure 6



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R
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Pendant Ordinance Sign
Figure 7

R
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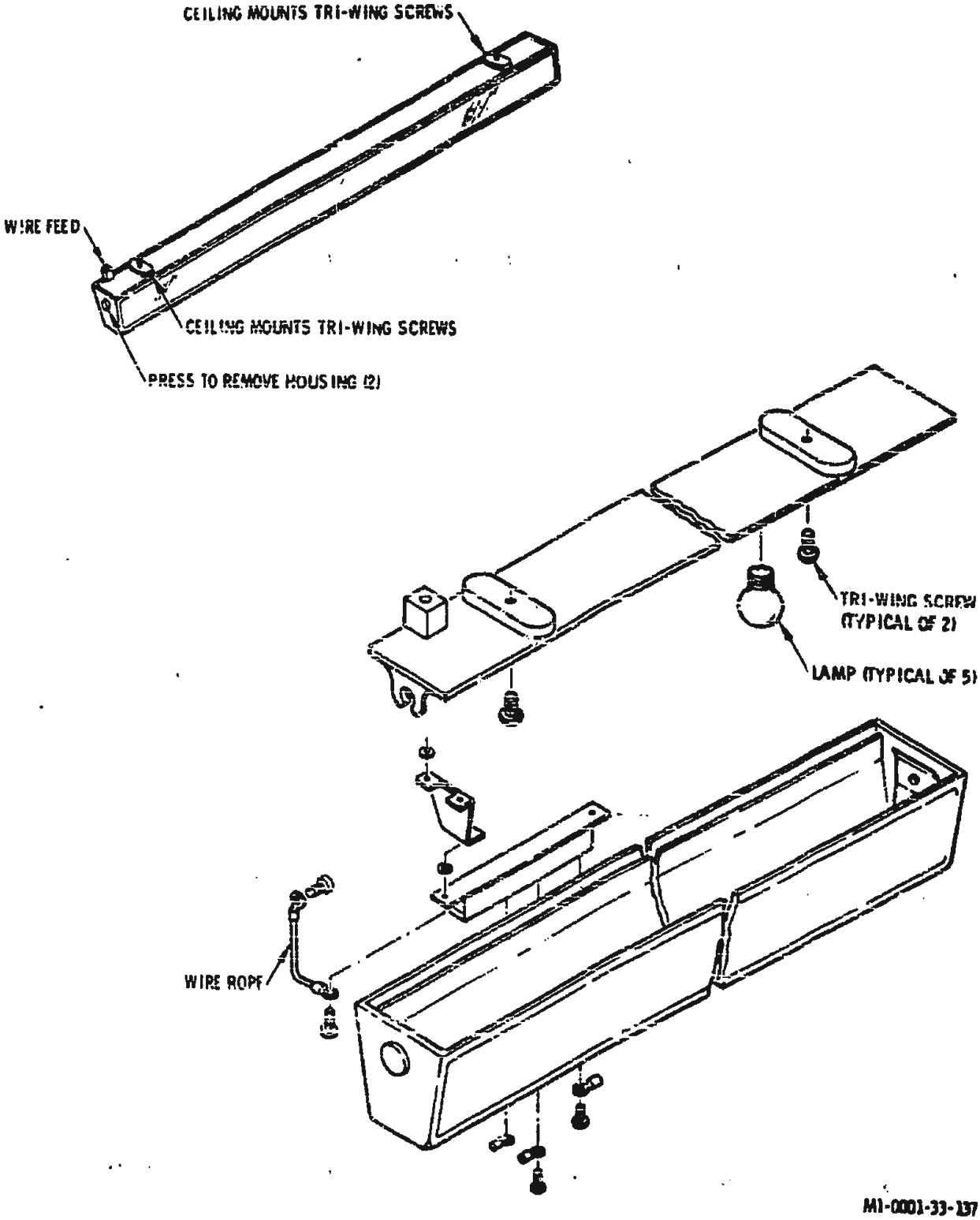
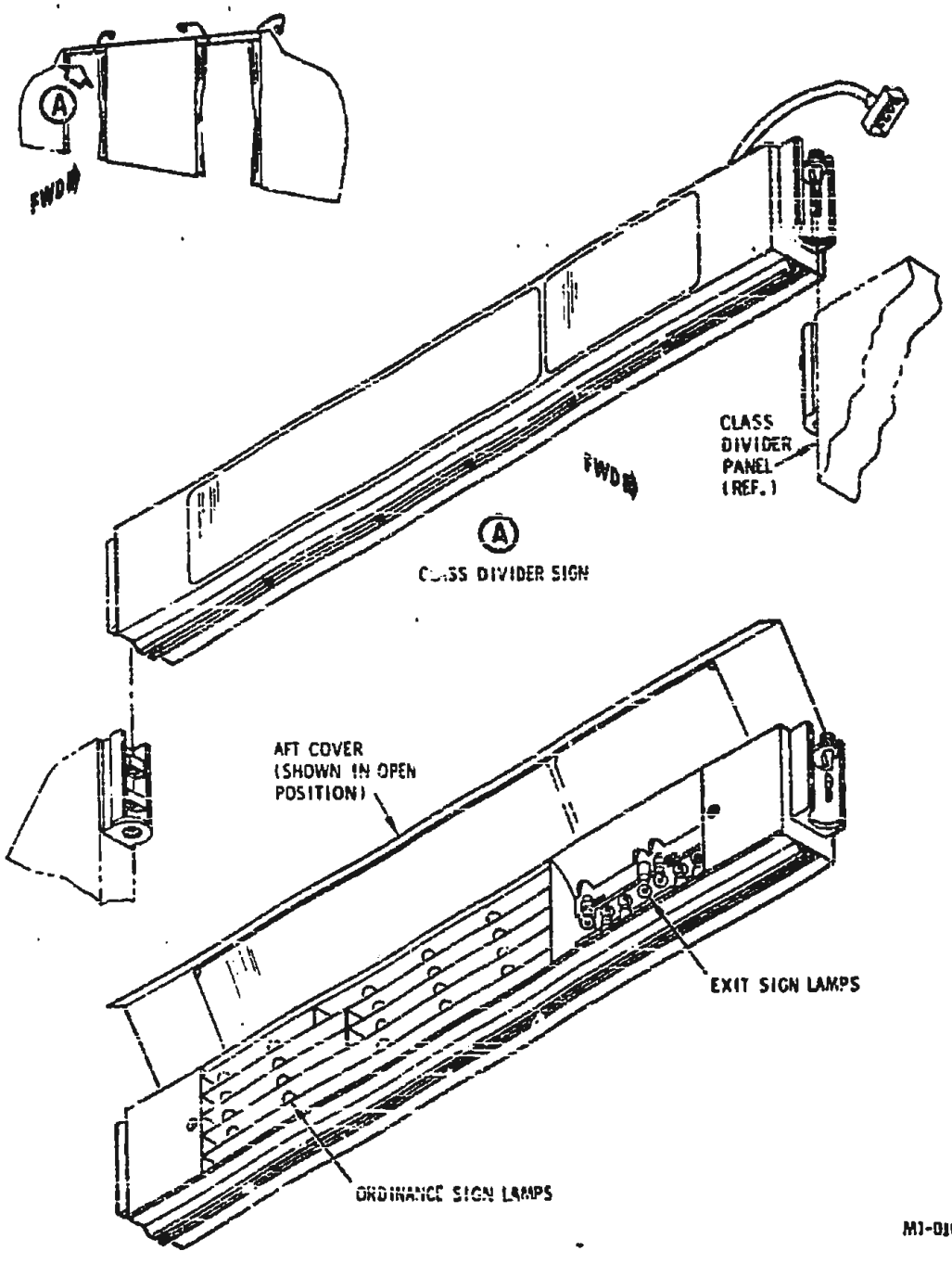
EFFECTIVITY: 001-031

001B

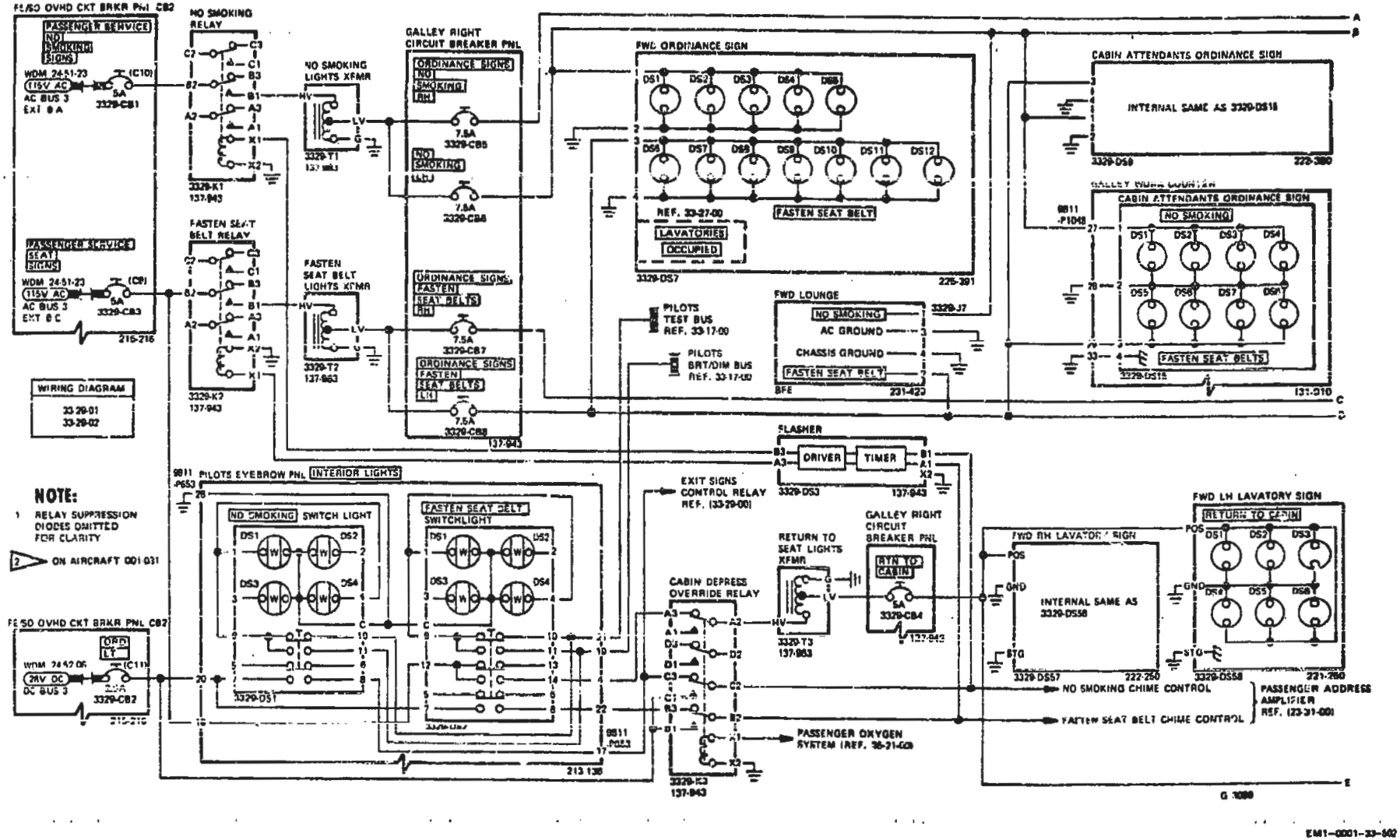


R R Pendant Ordinance Sign
Figure 7

R EFFECTIVITY: 032-999
R
001B



Class Divider Sign
Figure 8



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R Ordinance Sign Lighting Schematic
R Figure 9 (Sheet 1)

EFFECTIVITY: ALL

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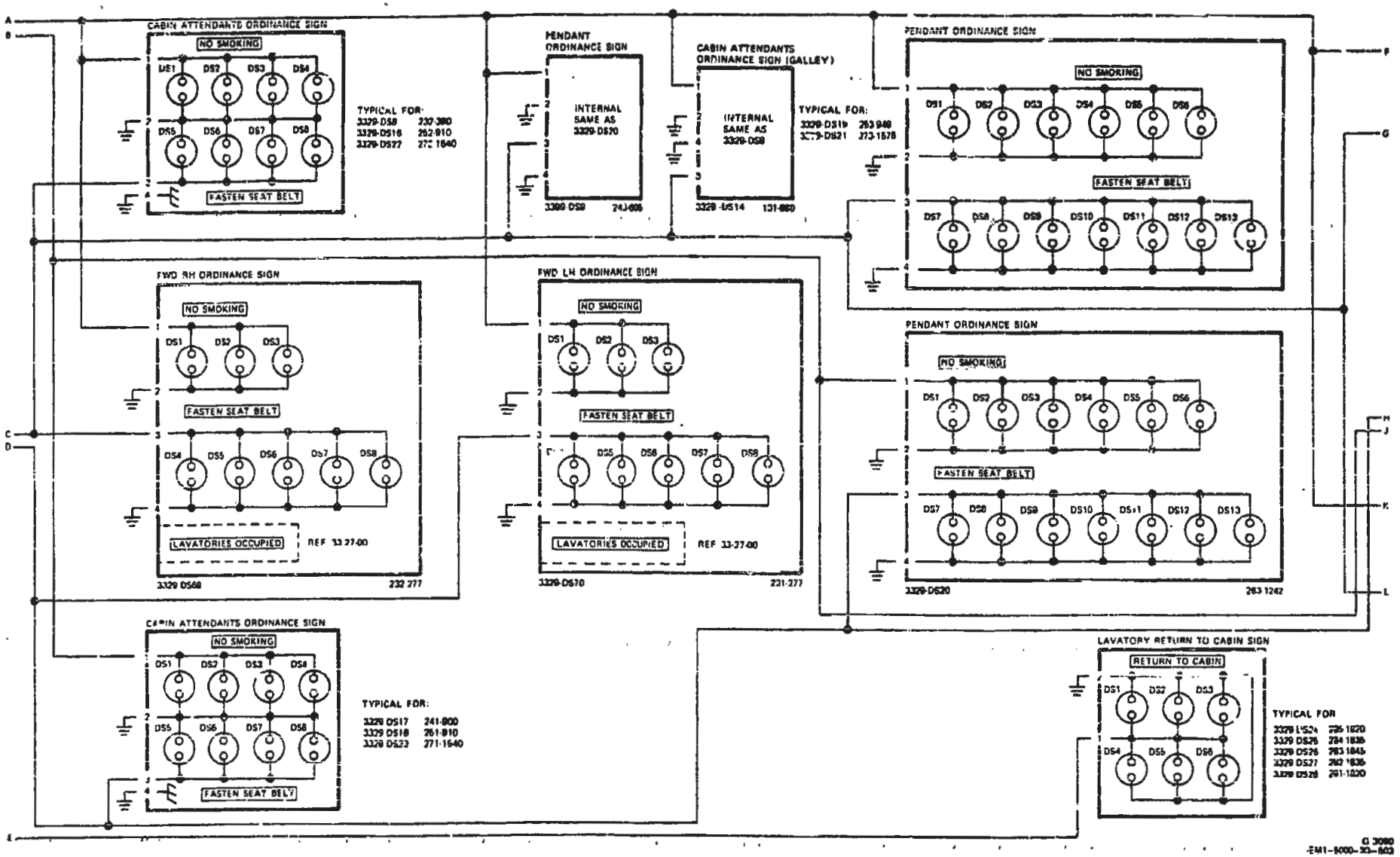
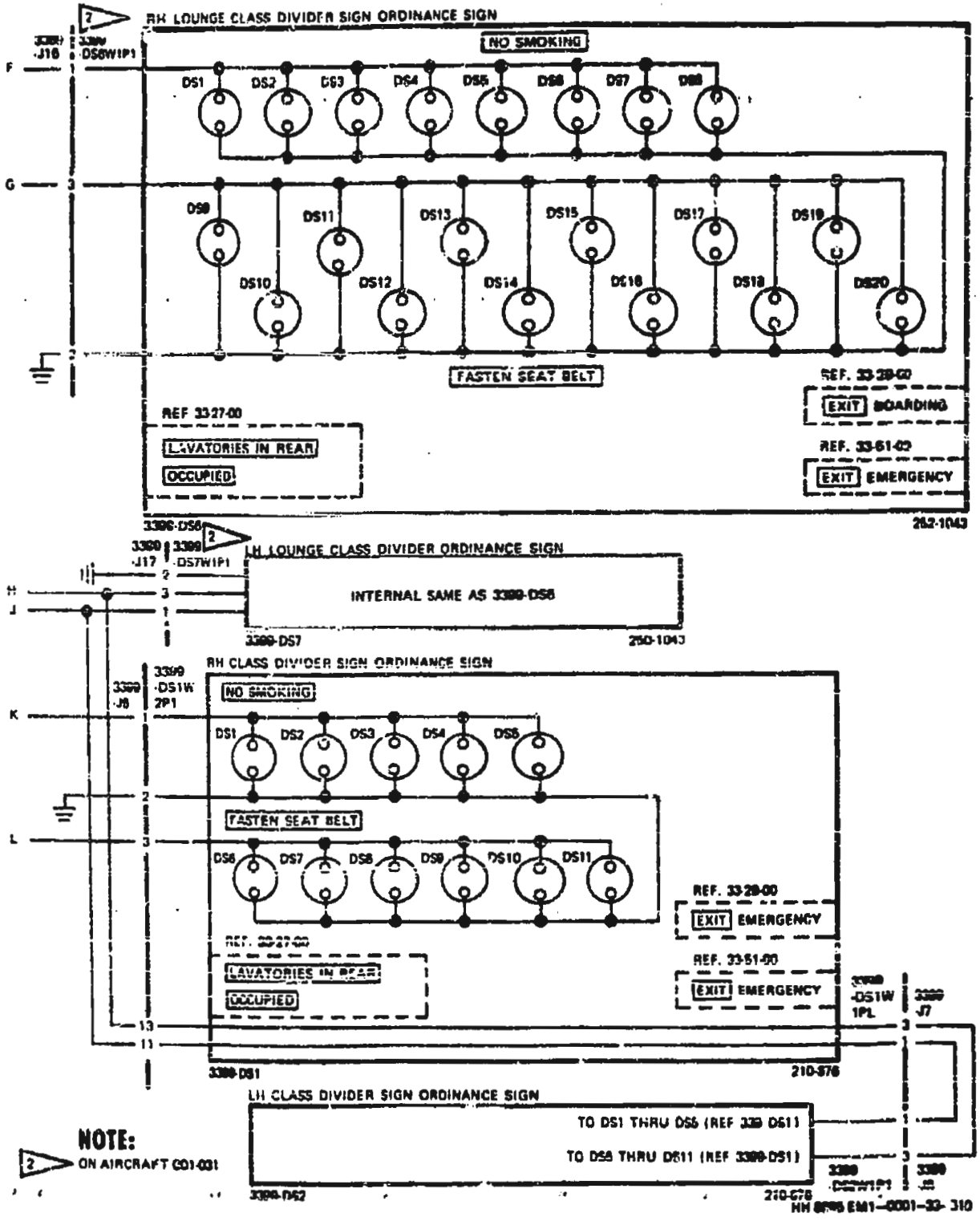
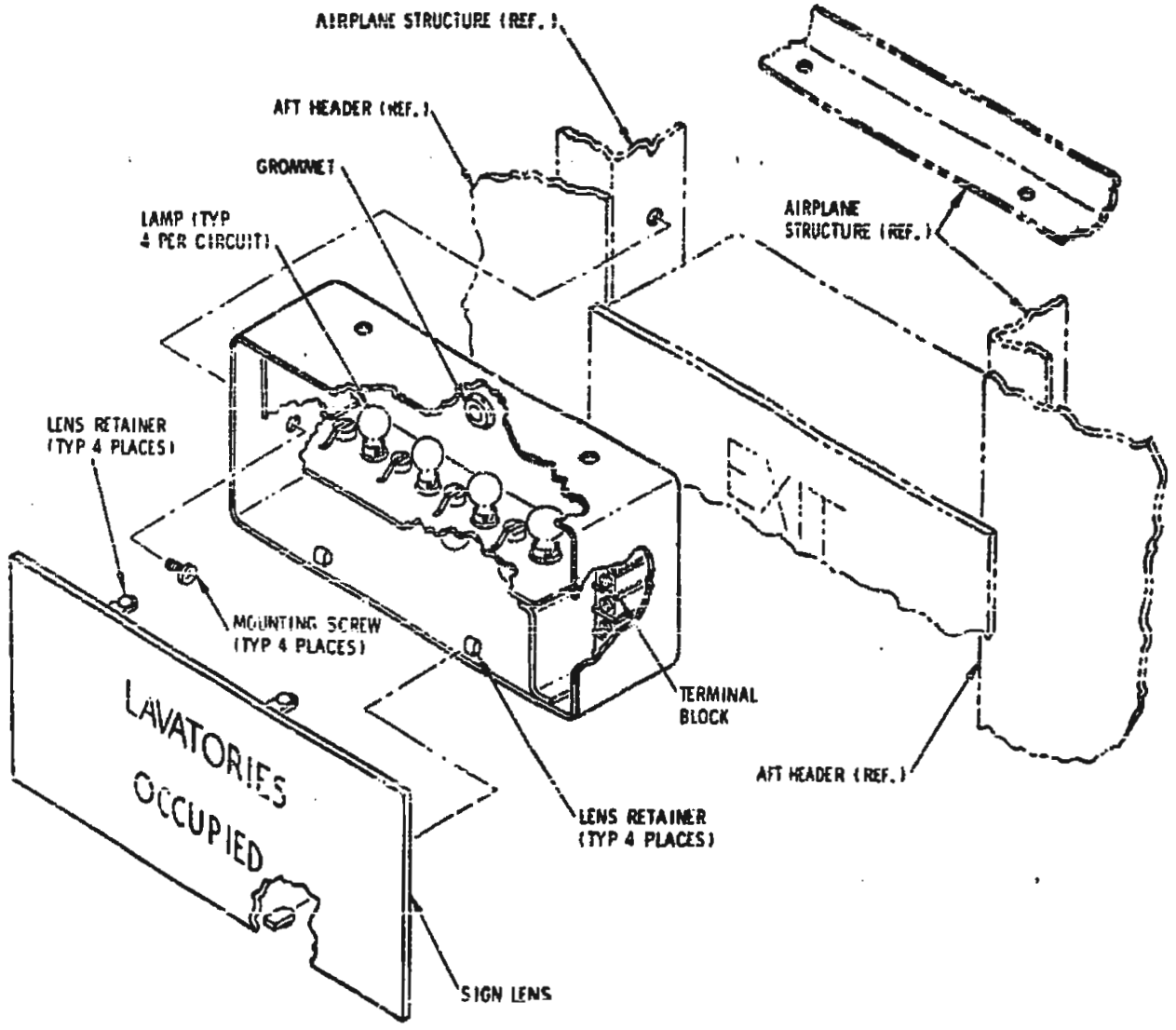


Ordinance Sign Lighting Schematic
Figure 9 (Sheet 2)



Ordinance Sign Lighting Schematic
Figure 9 (Sheet 3)

EFFECTIVITY: ALL



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Aft LAVATORIES OCCUPIED Sign
Figure 10

SIGN LIGHTING - FAULT ISOLATION

1. General

The electrical schematics in this section can be used when fault isolating the sign lighting system. Due to the relative simplicity of the circuits, no detailed fault isolation procedures are provided.

Refer to the Maintenance Manual Introduction for a more detailed discussion of the Fault Isolation Reporting Method (FIRM) and use of fault isolation schematics.

2. Fault Isolation/Identification

R Table 101 shows the Component Location Index(s), Figure 101, and
R Component Locator Diagram(s), Figure 102, along with electrical schematics that can be used when fault isolating the sign lighting system.

Figure 101 lists the system components alphabetically with their location and access area. Figure 102 is a pictorial reference locator.

Sign Lighting
Table 101

FIGURE	TITLE
101	Component Location Index
102	Component Locator Diagram
SCHEM 1	Exit Sign Lighting Schematic
SCHEM 2	Ordinance Sign Lighting Schematic

COMPONENT		QTY	AREA/ACCESS	REFERENCE
CIRCUIT BREAKERS:				
NO SMOKING SIGNS	3329-CB1	1	FE/SO OVHD CB2 PNL (C10)	*
SEAT SIGNS	3329-CB3	1	FE/SO OVHD CB2 PNL (C9)	*
ORDINANCE LTS	3329-CB2	1	FE/SO OVHD CB2 PNL (C11)	*
NO SMOKING (RH)	3329-CB5	1	GALLEY RIGHT CB PNL (A16)	*
NO SMOKING (LH)	3329-CB6	1	GALLEY RIGHT CB PNL (A17)	*
FASTEN SEAT BELTS (RH)	3329-CB7	1	GALLEY RIGHT CB PNL (A18)	*
FASTEN SEAT BELTS (LH)	3329-CB8	1	GALLEY RIGHT CB PNL (A19)	*
RETURN TO CABIN	3329-CB4	1	GALLEY RIGHT CB PNL (A20)	*
DOOR EXIT SIGNS (LH) FWD	3329-CB10	1	GALLEY RIGHT CB PNL (G18)	*
DOOR EXIT SIGNS (RH) FWD	3329-CB12	1	GALLEY RIGHT CB PNL (G17)	*
DIVIDER & HEADER EXIT SIGNS	3329-CB11	1	GALLEY RIGHT CB PNL (G16)	*
EXIT SIGNS	3329-CB9	1	GALLEY RIGHT CB PNL (E9)	*
FLASHER-ORDINANCE LTS	3329-DS3	1	MESC/192K	33-29-07
PANEL-INTERIOR LTS CONTROL		1	PILOTS OVHD PNL P5, ZONE 212	20-33-00
RELAYS:				
NO SMOKING	3329-K1	1	MESC/192K	*
FASTEN SEAT BELTS	3329-K2	1	MESC/192K	*
CABIN DEPRESS OVERRIDE	3329-K3	1	MESC/192K	*
EXIT SIGNS	3329-K4	1	MESC/192K	*
SIGNS:				
PENDANT ORDINANCE		*	CAB CEILING PNLS	33-29-12
ATTENDANT ORDINANCE		*	GALLEY AND ATTENDANT SEAT AREA	33-29-03
LAVATORY ORDINANCE		*	LAVATORY (INTERIOR)	33-29-02
CLASS DIVIDER ORDINANCE		2	LH AND RH CLASS DIVIDER	33-29-11
DOOR EXIT		6	ONE AT EACH DOOR	33-29-14
PENDANT EXIT		2	CAB CEILING PNLS	33-29-13
HEADER MOUNTED EXIT		4	LH AND RH HEADER FWD AND AFT LAV AREAS	33-29-10

*SEE WM EQUIPMENT LIST

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R
R

Component Location Index
Figure 101 (Sheet 1)

EFFECTIVITY: ALL

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COMPONENT	QTY	AREA/ACCESS	REFERENCE
TRANSFORMERS:			
NO SMOKING 3329-T1	1	MESC/192K	*
FASTEN SEAT BELTS 3329-T2	1	MESC/192K	*
RETURN TO SEAT 3329-T3	1	MESC/192K	*
EXIT SIGNS 3329-T4	1	MESC/192K	*

*SEE WM EQUIPMENT LIST

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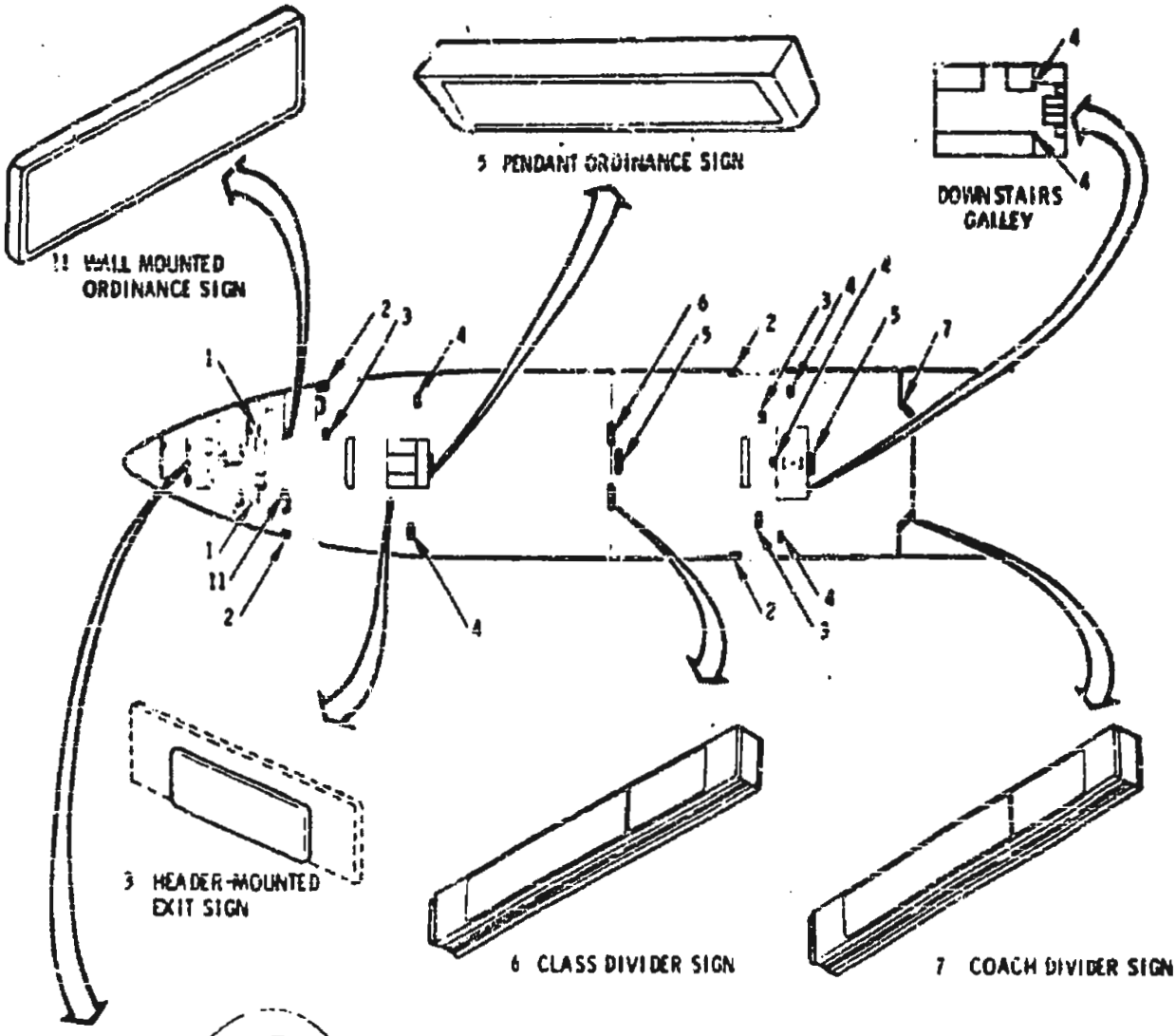
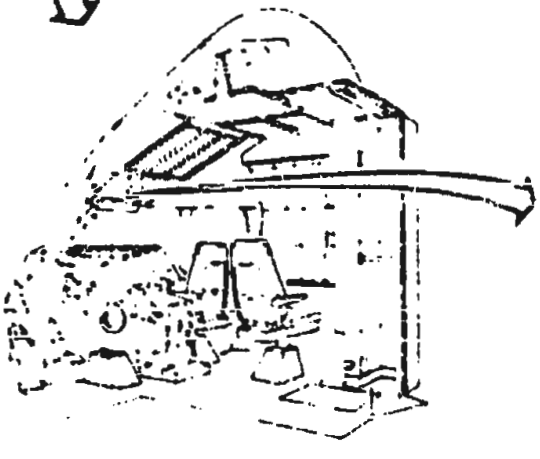
R Component Location Index
R Figure 101 (Sheet 2)

R EFFECTIVITY: ALL
R

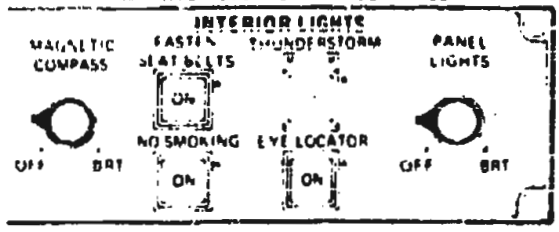
0018





FLIGHT STATION

INTERIOR LIGHTS CONTROL PANEL



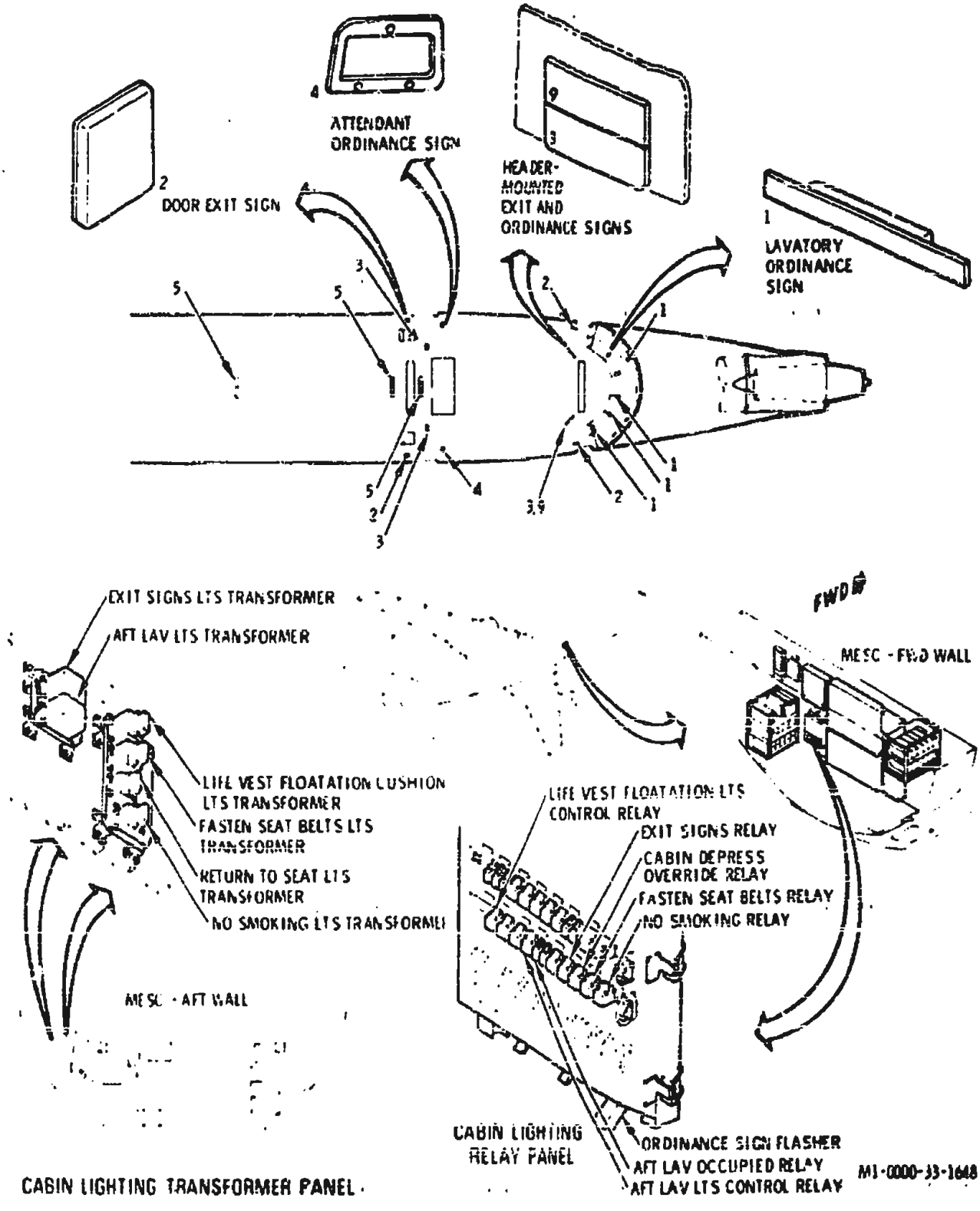
PILOTS OVERHEAD PANEL

M1-0000-33-1647

R R Components Locator Diagram
Figure 102 (Sheet 1)

R R EFFECTIVITY: ALL

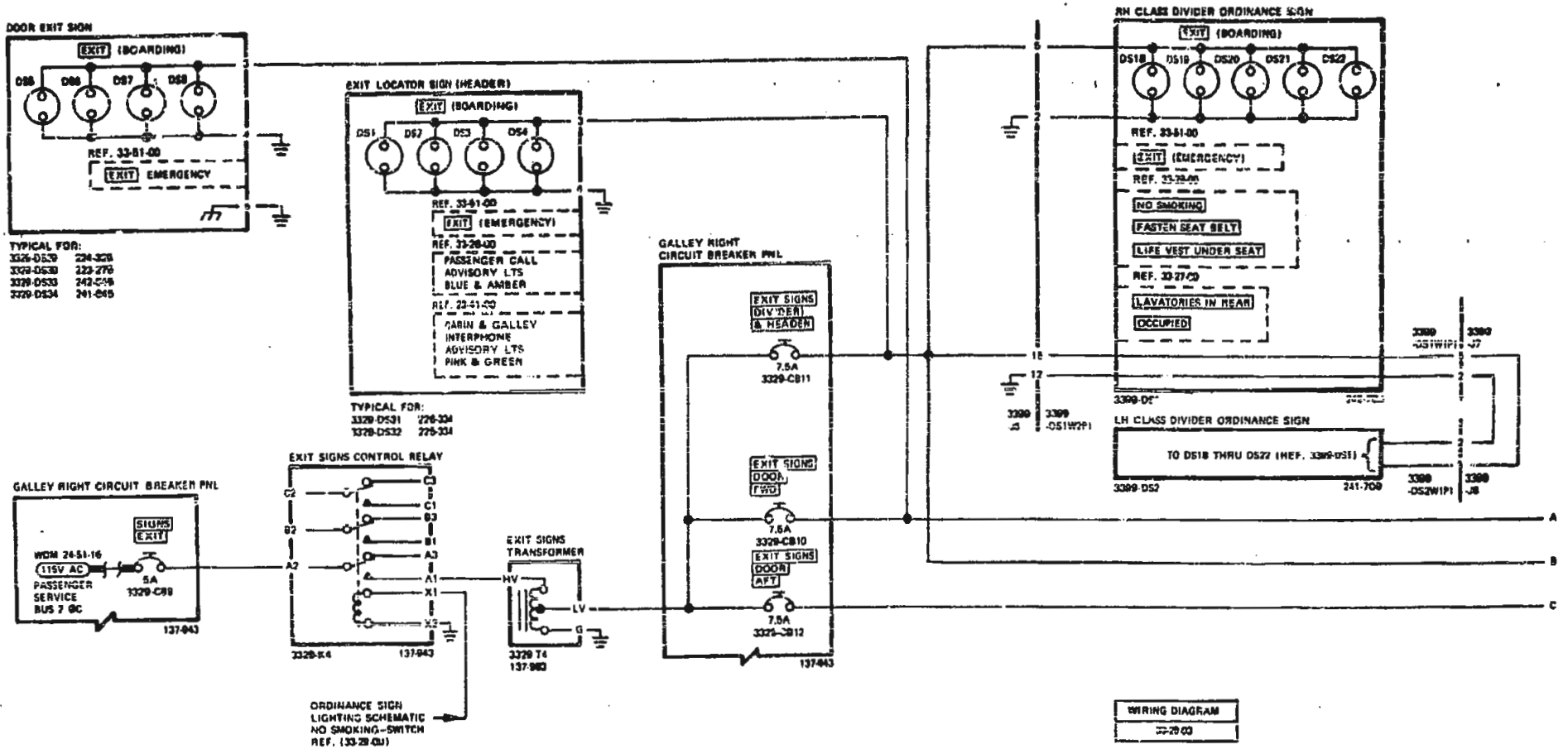
0019



R Components Locator Diagram
R Figure 102 (Sheet 2)

EFFECTIVITY: ALL

001B



NOTE

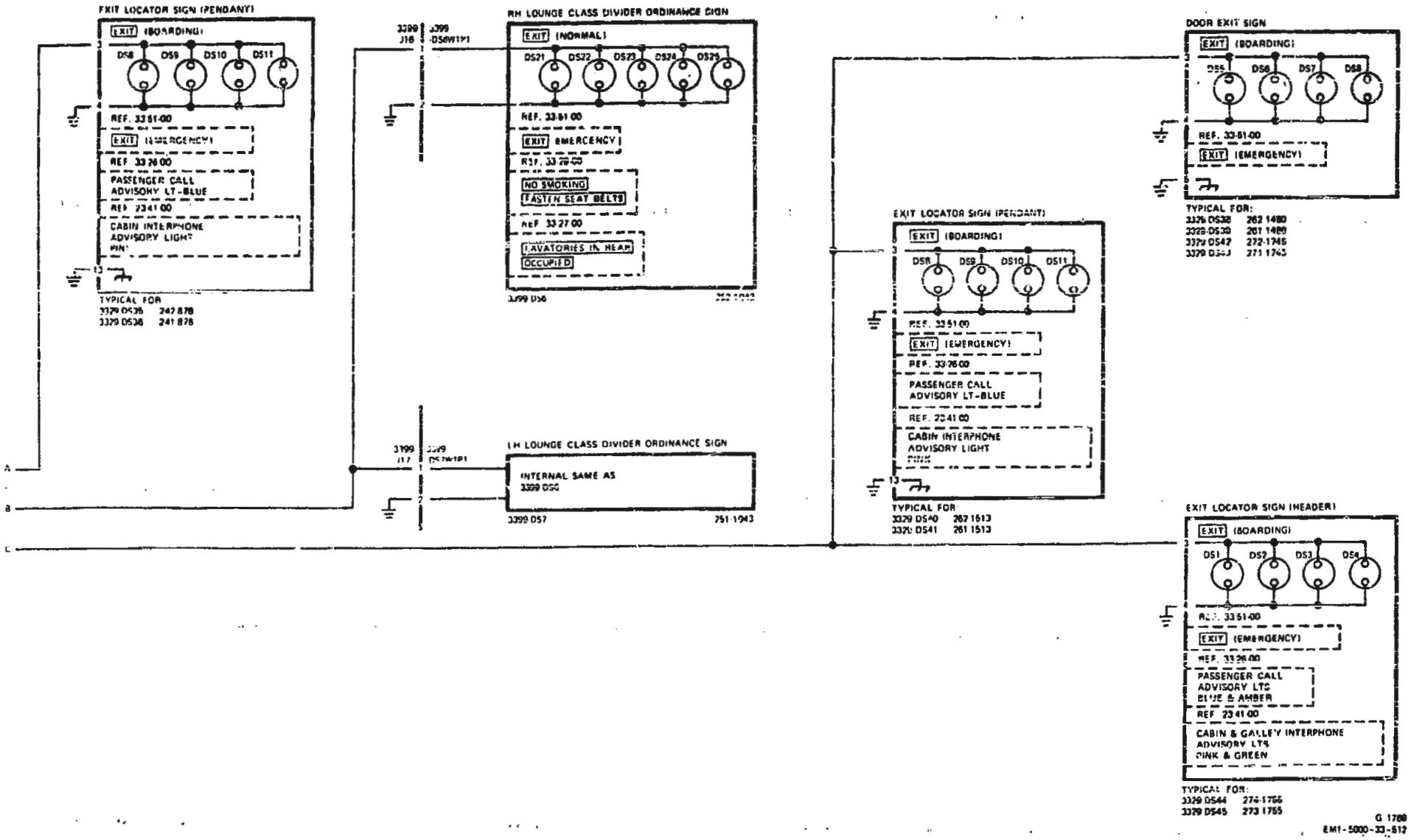
1 RELAY SUPPRESSION DIODE OMITTED FOR CLARITY

G 708
EM1-6000-33-511

R Exit Sign Lighting Schematic
R SCHEM 1 (Sheet 1

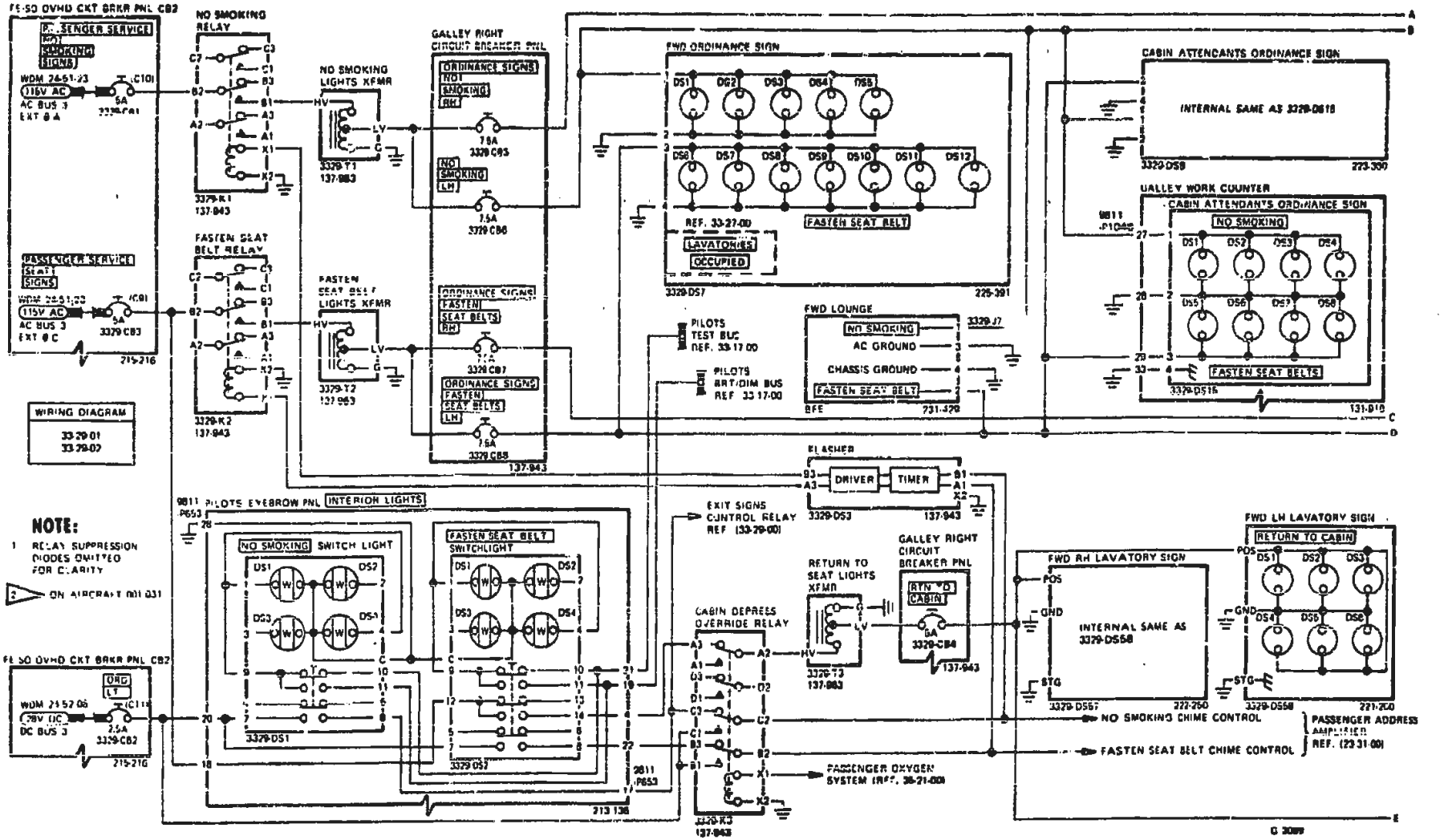
EFFECTIVITY: ALL

0018



EXIT Sign Lighting Schematic
SCHEM 1 (Sheet 2)

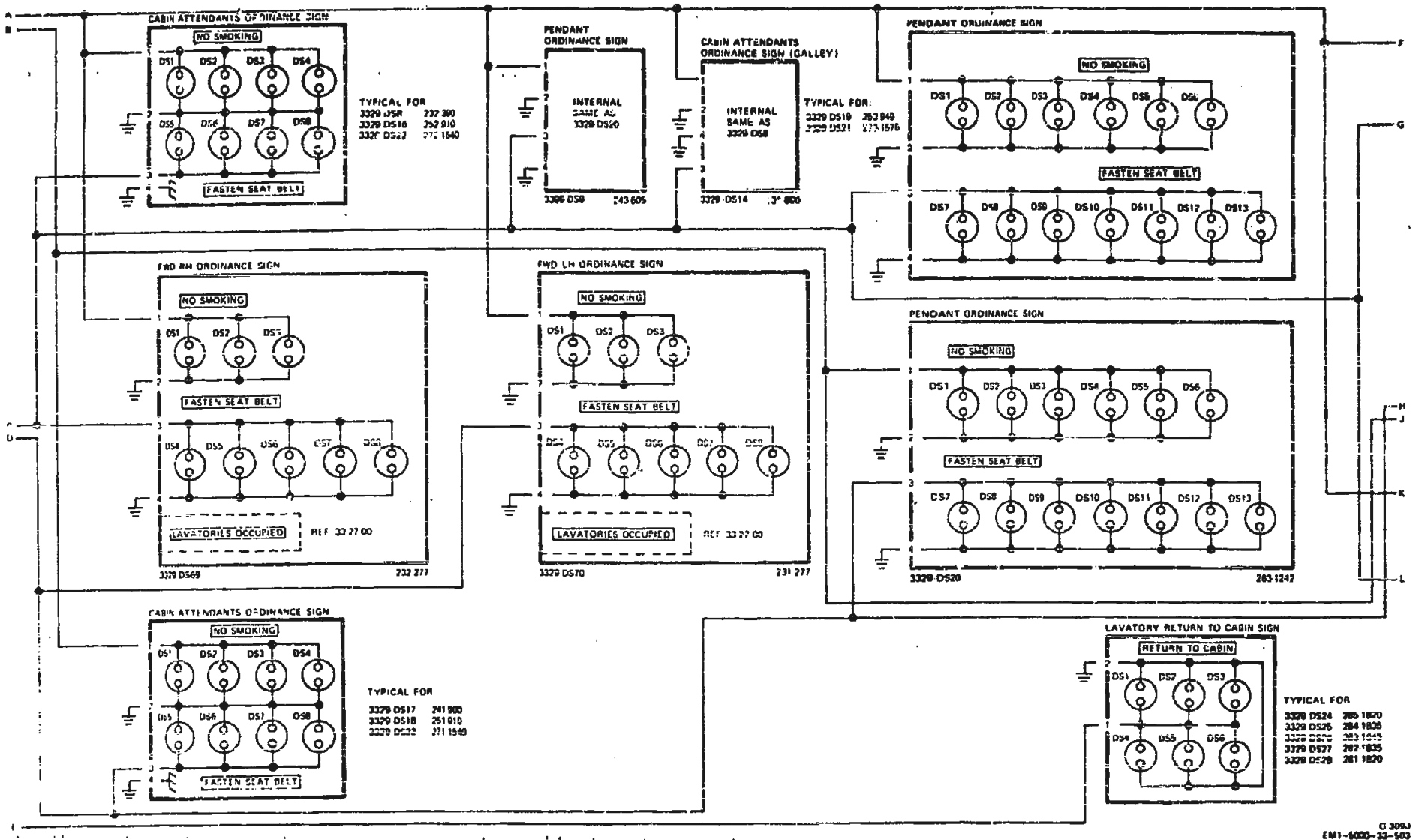
R
R
0018 EFFECTIVITY: ALL


NO SMOKING RELAY
FASTEN SEAT BELT RELAY
NO SMOKING LIGHTS XFMR
FASTEN SEAT BELT LIGHTS XFMR
GALLEY RIGHT CIRCUIT BREAKER PNL
FWD ORDINANCE SIGN
CABIN ATTENDANTS ORDINANCE SIGN
GALLEY WORK COUNTER
FWD LOUNGE
PILOTS TEST BUS REF. 33-17-00
PILOTS BRT/DIM BUS REF 33-17-00
FLASHER
DRIVER
TIMER
EXIT SIGNS CONTROL RELAY REF (33-29-00)
CABIN DEPRESS OVERRIDE RELAY
RETURN TO SEAT LIGHTS XFMR
GALLEY RIGHT CIRCUIT BREAKER PNL
FWD RH LAVATORY SIGN
FWD LH LAVATORY SIGN
INTERNAL SAME AS 3329-DS58
NO SMOKING CHIME CONTROL
FASTEN SEAT BELT CHIME CONTROL
PASSENGER ADDRESS AMPLIFIER REF. (23-31-00)
PASSENGER OXYGEN SYSTEM (REF. 35-21-00)
9811 PILOTS EYEBROW PNL INTERIOR LIGHTS
NO SMOKING SWITCH LIGHT
FASTEN SEAT BELT SWITCHLIGHT
WIRING DIAGRAM 33-29-01 33-29-02
NOTE:
1 RELAY SUPPRESSION DIODES OMITTED FOR CLARITY
2 ON AIRCRAFT 001 031

Ordinance Sign Lighting Schematic
SCHEM 2 (Sheet 1)

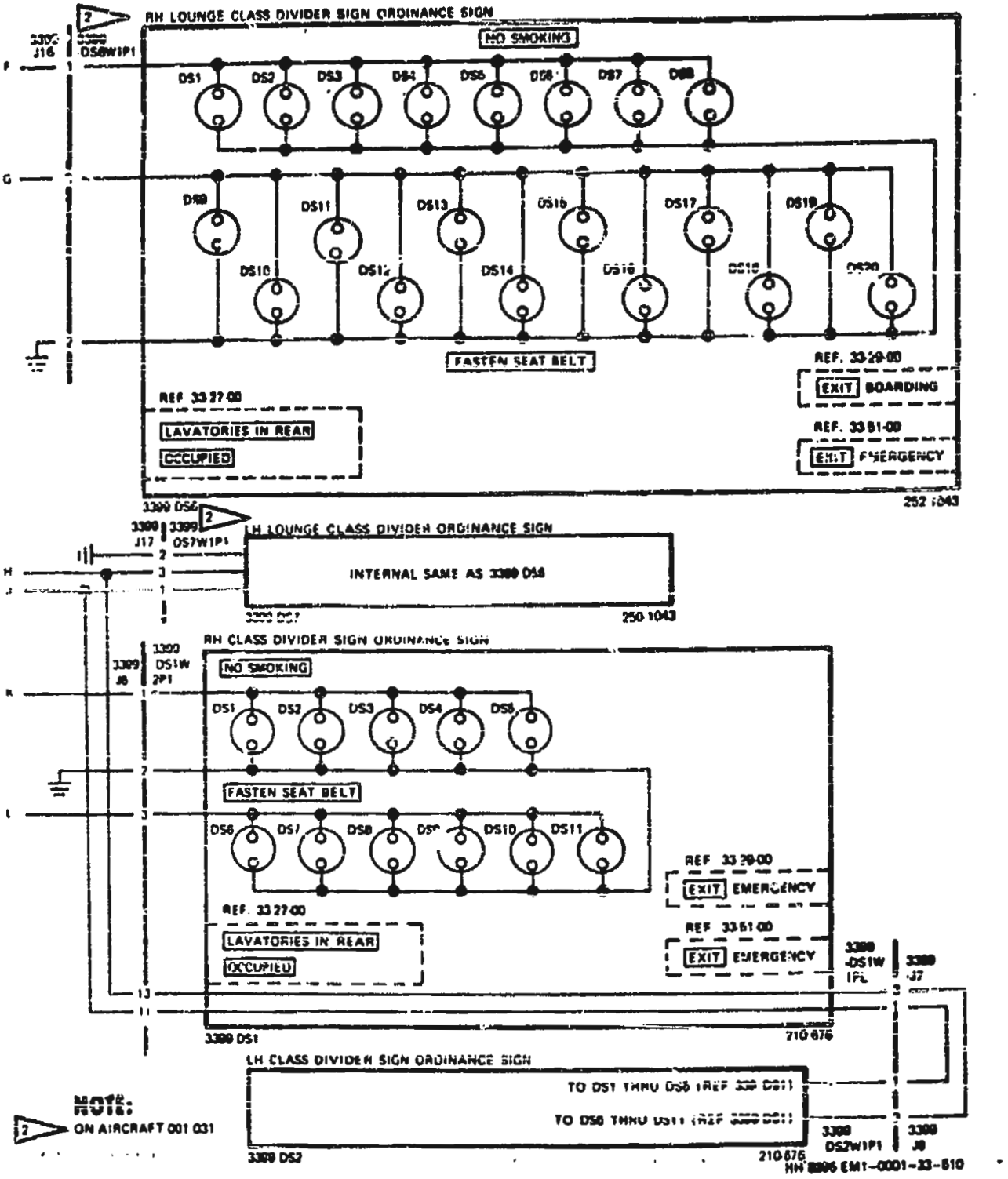
EFFECTIVITY: ALL

0018



Ordinance Sign Lighting Schematic
SCHEM 2 (Sheet 2)

R EFFECTIVITY: ALL
R
0018



Ordinance Sign Lighting Schematic
SCHEM 2 (Sheet 3)

R EFFECTIVITY: ALL
R
0018

SIGN LIGHTING - ADJUSTMENT AND TEST

1. Referenced Procedure

R 24-00-00 Electrical Power - Maintenance Practices

2. Adjustment/Test

A. Operational Test

R (1) Turn on electrical power (Ref. 24-00-00).

(2) On Flight Engineer/Second Officers overhead circuit breaker panel CB2, zone 215, verify that following circuit breakers are closed:

PASSENGER SERVICE - SEAT SIGNS (C9), NO SMOKING SIGNS (C10), and ORD LTS (C11)

R On galley right circuit breaker panel, zone 130, verify that the following circuit breakers are closed:

PASS SERV BUS 2R - SIGNS EXIT (9E)

ORDINANCE SIGNS - (16A), (17A), (18A), (19A), (20A)

EXIT SIGNS - DOOR - FWD (16G), AFT (17G), DIVIDER & HEADER (18G)

On galley left circuit breaker panel, zone 130, verify that circuit breaker PASS SERV BUS 3L -

(3) On INTERIOR LIGHTS section of eyebrow panel, zone 210, press NO SMOKING switchlight to ON position. Verify the following:

(a) Switchlight legend ON comes on and a low chime tone sounds.

(b) All NO SMOKING legends flash for 15 seconds, then stay on.

(c) EXIT signs come on.

(4) Press NO SMOKING switchlight to off position and verify the following:

(a) Switchlight legend goes out and low chime tone sounds.

(b) NO SMOKING legends, EXIT signs go out.

(5) On INTERIOR LIGHTS section of eyebrow panel, press FASTEN SEAT BELTS switchlight to on position and verify the following:

(a) Switchlight legend ON comes on and a low chime tone sounds.

(b) All FASTEN SEAT BELTS legends flash for 15 seconds, then stay on.

(c) All lavatory RETURN TO CABIN signs and LIFE VEST UNDER SEAT legends come on.

(6) Press FASTEN SEAT BELTS to off position and verify the following:

(a) Switchlight legend goes out and low chime tone sounds.

(b) ALL FASTEN SEAT BELTS legends, LIFE VEST UNDER SEAT legends and all RETURN TO CABIN signs go out.

R (7) Turn off electrical power (Ref. 24-00-00).

LAVATORY RETURN-TO-CABIN SIGN - REMOVAL AND INSTALLATION

1. Referenced Procedure

24-41-00 External Power/Ground Service System - Maintenance Practices

2. Removal/Installation

A. Removal

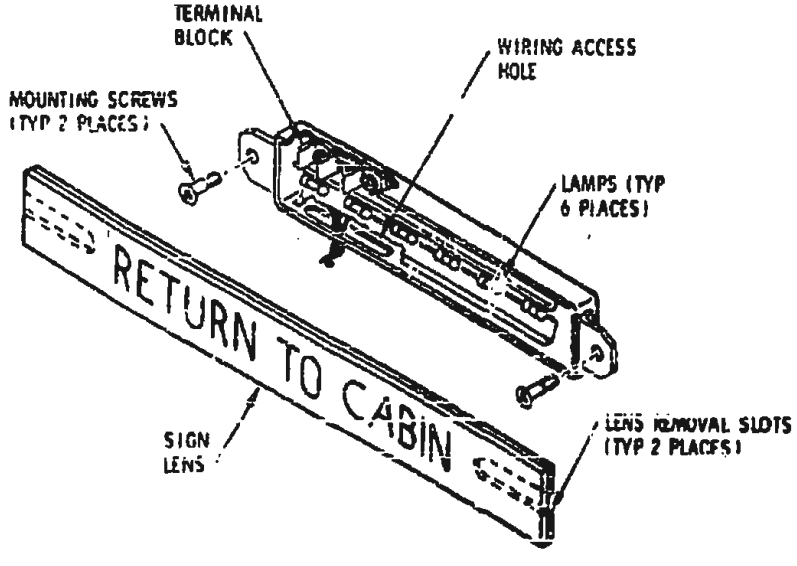
(1) On galley right circuit breaker panel, zone 130, open and tag circuit breaker ordinance signs - RETURN TO CABIN.

(2) Grasp sign lens by finger slots and pull out to remove (Ref. Fig. 401).

(3) Disconnect and tag wires on terminal block.

(4) Remove screws and sign housing.

B. Installation



HH 9131
M1-0100-33-005

R RETURN TO CABIN Lavatory Sign - Removal and Installation
R Figure 401

(1) Verify that circuit breaker opened in Step 2A(1) is opened and tagged.

(2) Position sign housing and secure with screws (Ref. Fig. 401).

(3) Remove tags and connect wires to terminal block.

(4) Install lens in sign.

(5) Remove tag and close circuit breaker opened in Step 2A(1).

3. Relamping

A. Lavatory RETURN-TO-CABIN (SEAT) Sign

(1) Remove lens using finger slots in ends of sign (Ref. Fig. 401).

(2) Remove faulty lamp by pressing down on lamp head to release from holder.

(3) Install replacement lamp.

(4) Turn on electrical power (Ref. 24-41-00).

(5) Turn on FASTEN SEAT BELTS signs to test lamp. Turn signs off after test.

(6) Turn off electrical power (Ref. 24-41-00).

(7) Install lens in sign.

CABIN ATTENDANTS ORDINANCE SIGN - REMOVAL AND INSTALLATION

1. Referenced Procedures

20-24-02 Crimped Electrical Contact - Removal and Installation

24-41-00 External Power/Ground Service System - Maintenance Practices

2. Removal/Installation

A. Removal

(1) On galley right circuit breaker panel, zone 130, open and tag circuit breakers ORDINANCE SIGNS - NO SMOKING and FASTEN SEAT BELTS - LH or RH, as applicable.

R (2) Obtain access to sign (Ref. Fig. 401).

R (3) At the stowage compartment end cap (1):

R (a) Open stowage cabinet, remove and tag terminal
R connections.

R (b) Remove nuts and washers.

R (c) Remove housing.

R (4) At the lift control panel (2), or lower galley (3):

(a) Remove screws from top and bottom of trim, remove trim (Ref. Fig. 401).

(b) Remove screws securing sign to nutplate.

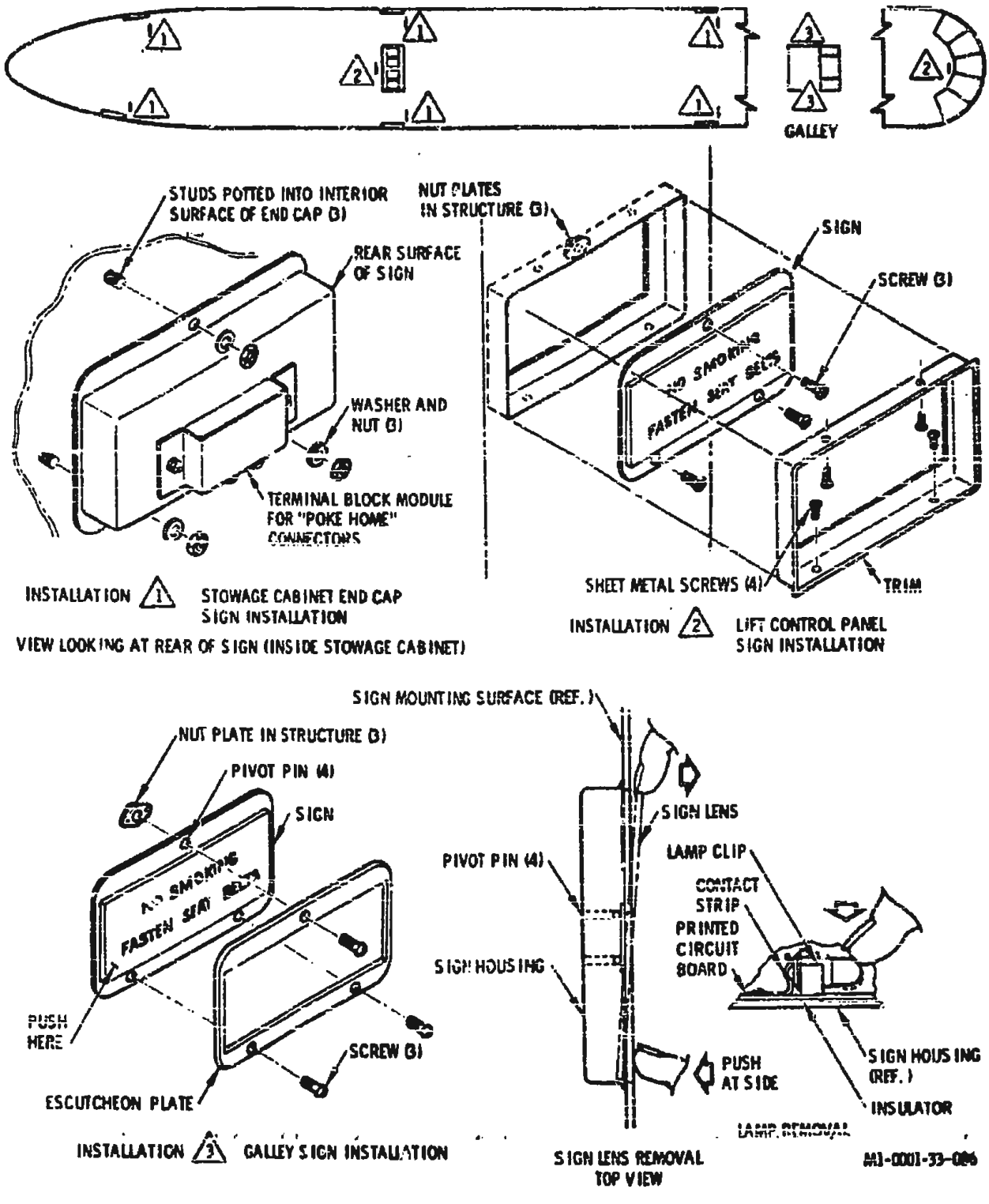
(c) Pull housing out.

(d) Remove and tag terminal connections. (Ref. 20-24-02).

B. Installation

(1) Verify that circuit breakers opened in Step 2A(1) are open and tagged.

R (2) Attach wires to terminal block (Ref. 20-24-02) and remove wire tags.



R Cabin Attendants Ordinance Sign - Removal and Installation
R Figure 401

EFFECTIVITY: ALL

(3) Install sign.

(a) At the stowage cabinet end cap (1): position sign in end cap (Ref. Fig. 401).

(b) Secure sign with washers and nuts.

R (4) At the lift control panel (2), or lower galley (3):

(a) Position sign and secure with screws.

(b) Install and secure trim.

(5) Remove tags and close circuit breakers opened in Step 2A(1).

3. Relamping

A. Cabin Attendants Ordinance Sign

R (1) Depress one end of sign lens (Ref. Fig. 401). Lens will rotate about pivot pins causing opposite end of lens to raise away from sign housing.

R (a) Remove lens.

R (2) To remove defective lamp depress glass envelope; the
R opposite end will raise away from the lamp clip.

R (a) Remove lamp.

R (3) Install new lamp.

(4) Turn on Electrical power (Ref. 24-41-00).

(5) Turn on NO SMOKING or FASTEN SEAT BELTS signs, as applicable, to test lamp. Turn off signs after test.

(6) Turn off electrical power (Ref. 24-41-00).

R (7) Press sign lens into housing.

AFT LAVATORIES OCCUPIED SIGN - REMOVAL AND INSTALLATION

1. Referenced Procedure

   24-41-00 External Power/Ground Service System - Maintenance Practices

2. Removal/Installation

   A. Removal

      (1) On galley right circuit breaker panel, zone 130, open and tag circuit breaker SIGNS - LAV OCC -AFT.

      (2) Remove sign lens by pulling forward at top of lens (Ref. Fig. 401).

R   (3) Remove and tag wires on terminal block.

      (4) Remove screws securing sign (two on top and one on each side).

      (5) Feed wires through grommet and remove sign.

   B. Installation

      (1) Verify that circuit breaker opened in Step 2A(1) is opened and tagged.

      (2) Feed wires through grommet into sign (Ref. Fig. 401).

      (3) Position sign and secure with screws (two on top and one on each side).

      (4) Connect wires to terminal block.

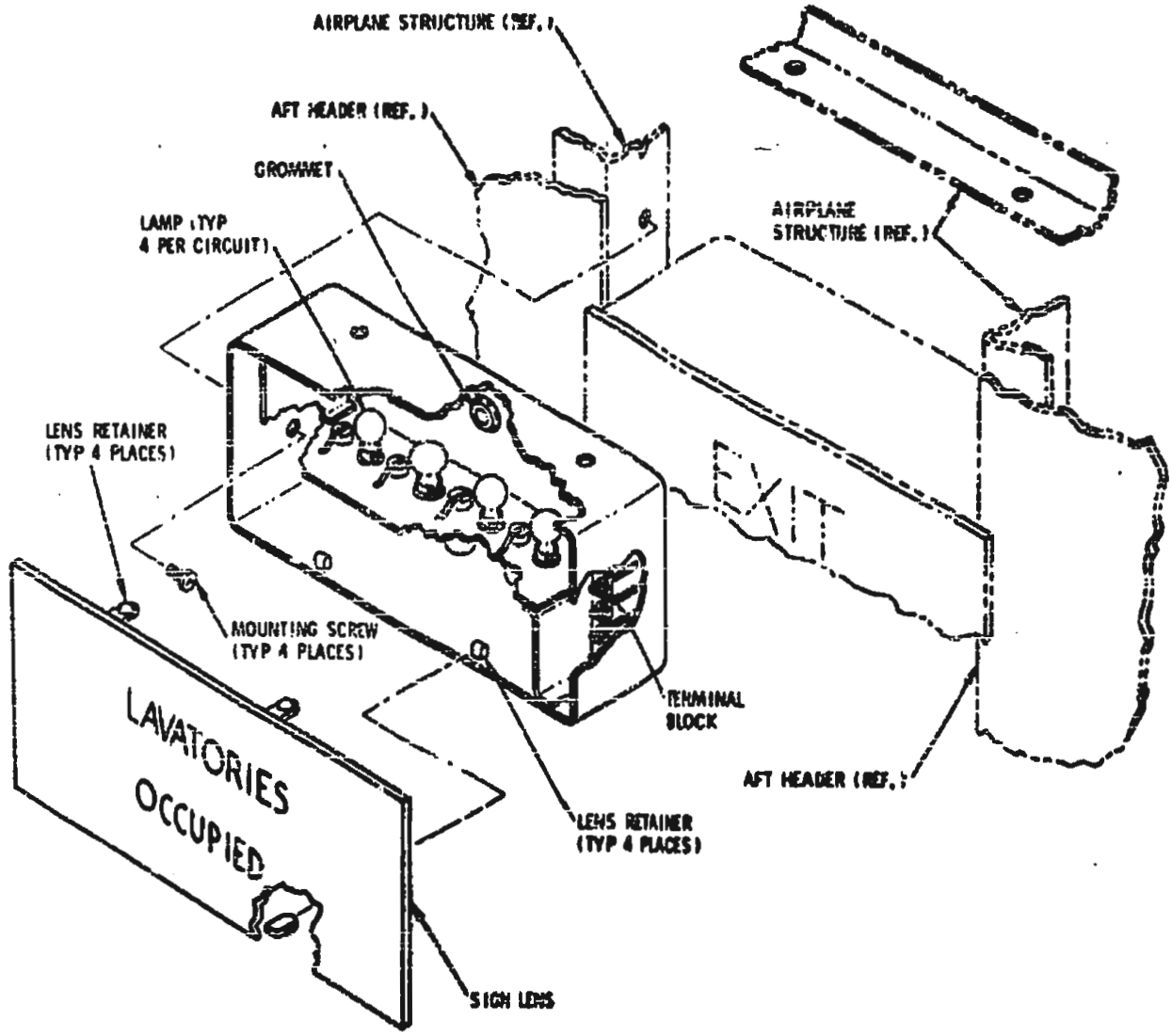
      (5) Replace sign lens.

      (6) Remove tag and close circuit breaker opened in Step 2A(1).

3. Relamping

   A. Aft LAVATORIES OCCUPIED Sign

      (1) Remove sign lens by pulling forward at top of lens (Ref. Fig. 401).



Lavatory Occupied Ordinance Sign - Removal and Installation
Figure 401

(2) Remove faulty lamp.

(3) Install replacement lamp.

(4) Turn on electrical power (Ref. 24-41-00).

(5) Operate all aft lavatory door latches to the OCCUPIED position to test lamp. Return latches to VACANT position after test.

(6) Turn off electrical power (Ref. 24-41-00).

(7) Replace sign lens.

ORDINANCE SIGNS FLASHER - REMOVAL AND INSTALLATION

1. Referenced Procedure

33-29-00 Sign Lighting - Adjustment and Test

2. Removal/Installation

A. Removal

(1) On Flight Engineer/Second Officers overhead circuit breaker panel CB2, zone 215, open and tag circuit
R breaker PASSENGER SERVICE - ORDS LT (C-11).

(2) Gain access to the ordinance signs flasher in the mid electrical service center, zone 137.

(3) Remove screws that secure the ordinance signs flasher (Ref. Fig. 401).

(4) Unplug and remove the ordinance signs flasher.

B. Installation

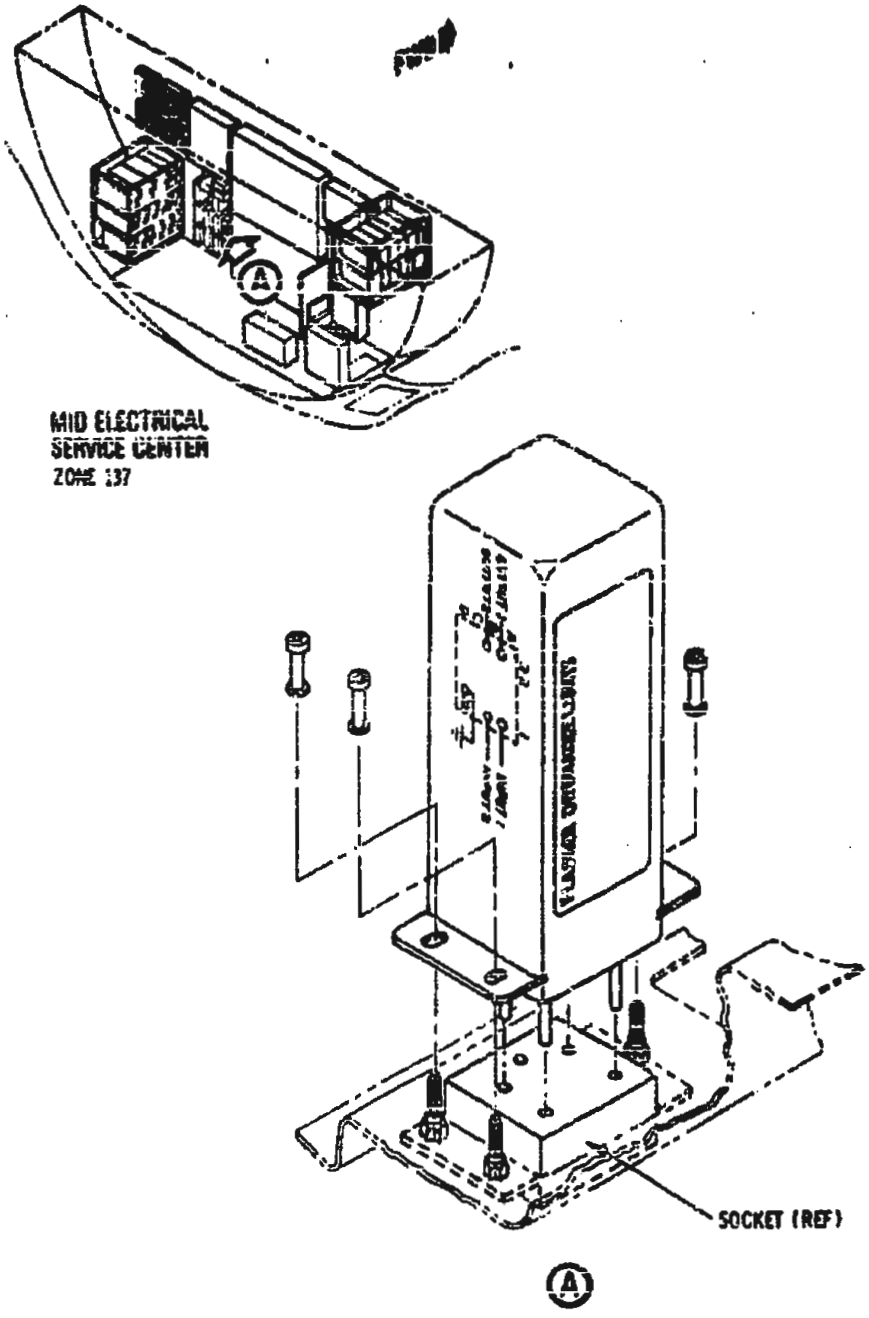
(1) Verify that circuit breaker opened in Step 2A(1) is open and tagged.

(2) Plug ordinance signs flasher into socket FLASHER ORD LIGHTS.

(3) Secure ordinance signs flasher with screws.

(4) Remove tag and close circuit breaker opened in Step 2A(1).

(5) Test ordinance signs flasher by performing applicable portion of sign lighting operational test (Ref. 33-29-00).



R Ordinance Signs Flasher - Removal and Installation
R Figure 401

EFFECTIVITY: ALL

001B

HEADER-MOUNTED EXIT LOCATER SIGN - REMOVAL AND INSTALLATION

1. Referenced Procedure

   24-41-00 External Power/Ground Service System - Maintenance Practices

2. Removal/Installation

   A. Removal

      (1) On galley right circuit breaker panel, zone 130, open and tag circuit breaker EXIT SIGNS - DIVIDER & HEADER (for signs in zones 223 and 224) OR DOOR - AFT (for signs in zones 271 and 272).

      On FLIGHT ENGINEERS/SECOND OFFICERS OVERHEAD circuit breaker panel CB2, zone 215, open and tag circuit breaker PASSENGER SERVICE - HOST ADVSY IND (G11).

      (2) Remove screws that secure sign cover to housing, and slide sign cover down (Ref. Fig. 401).

      (3) Remove terminal block cover. Remove and tag wires to terminal block.

      (4) Remove screws securing housing assembly to ceiling header.

      (5) Remove housing assembly while carefully feeding wires through grommet.

   B. Installation

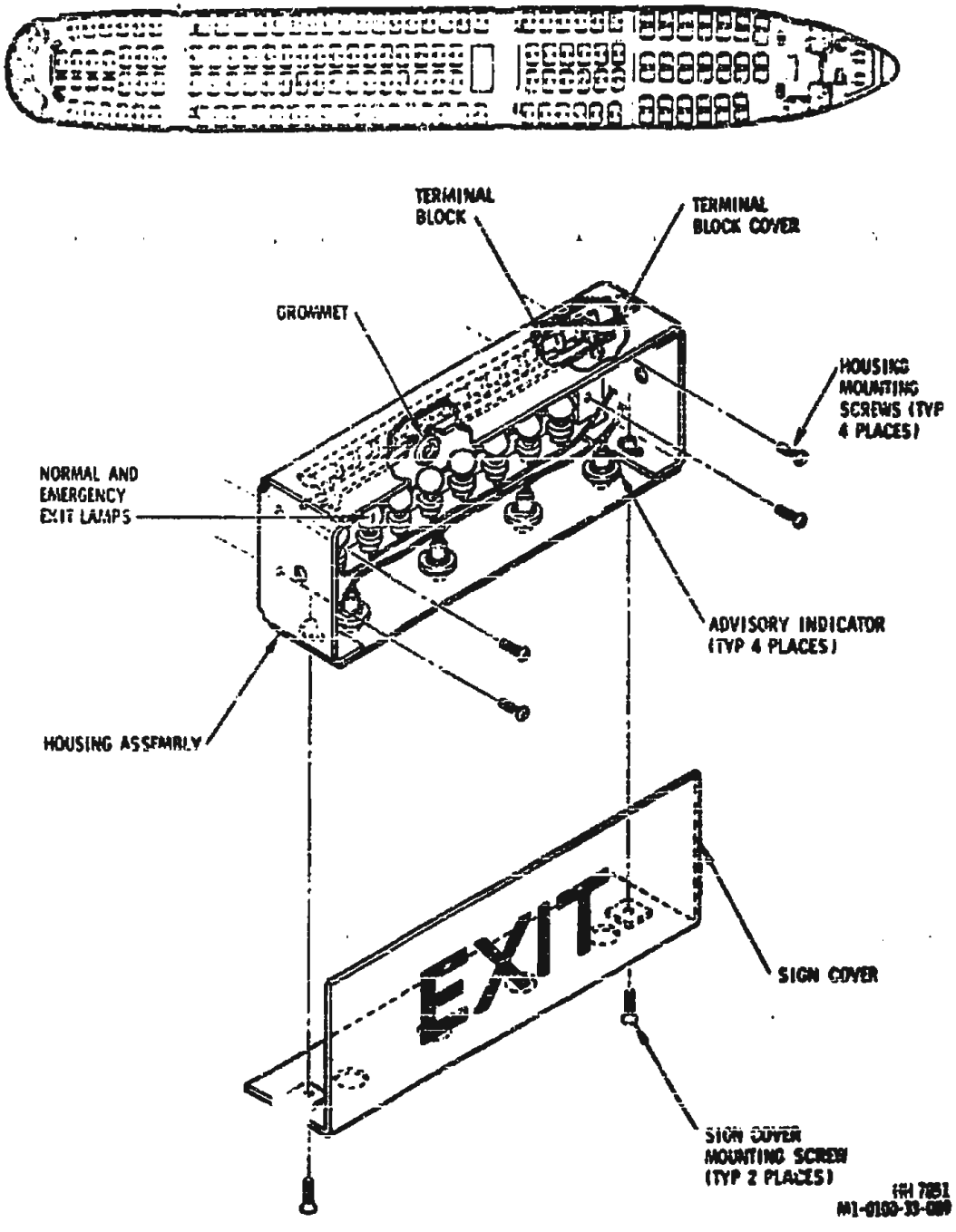
      (1) Verify that circuit breakers opened in Step 2A(1) are open and tagged.

      (2) Support housing assembly at ceiling header, and feed wires through grommet.

      (3) Insert housing assembly in ceiling header and secure in place with mounting screws.

      (4) Attach wires to terminals of terminal block and remove wire tags. Install terminal block cover.

      (5) Install sign cover on housing assembly and secure with mounting screws.



Header-mounted EXIT Locater Sign - Removal and Installation
Figure 401

(6) Remove tags and close circuit breakers opened in Step 2A(1).

3. Relamping

A. Exit Sign

(1) Remove screws that secure sign cover to housing and slide sign cover down (Ref. Fig. 401).

(2) Remove faulty lamp.

(3) Install replacement lamp.

(4) Test normal lamp as follows:

(a) Turn on electrical power (Ref. 24-41-00).

(b) Turn on NO SMOKING signs to test lamp. Turn signs off after test.

(c) Turn off electrical power (Ref. 24-41-00).

(5) Test emergency lamp by operating momentary TEST switch on emergency power pack.

(6) Install sign cover on housing assembly and secure with mounting screws.

B. Advisory Indicator

(1) Unscrew cap on advisory indicator and remove lamp from cap.

(2) Insert new lamp into cap and screw cap into socket of advisory indicator.

CLASS DIVIDER SIGN - REMOVAL AND INSTALLATION

1. Referenced Procedure

	24-41-00	External Power/Ground Service System - Maintenance Practices
R	25-25-09	Movable Class Divider Partition - Removal and
R		Installation

2. Removal/Installation

A. Removal

(1) On galley right circuit breaker panel, zone 130, open and tag circuit breakers as follows:

EXIT SIGNS - DIVIDER & HEADER

SIGNS - LAV OCC - AFT

ORDINANCE SIGNS

NO SMOKING - LH or RH, as applicable

FASTEN SEAT BELTS - LH or RH, as applicable

(1) Disconnect electrical connectors from receptacles.

(2) Loosen bolts in attaching brackets at each end of sign (Ref. Fig. 401).

(3) Raise sign evenly by pushing up simultaneously at each end.

(4) Remove class divider sign.

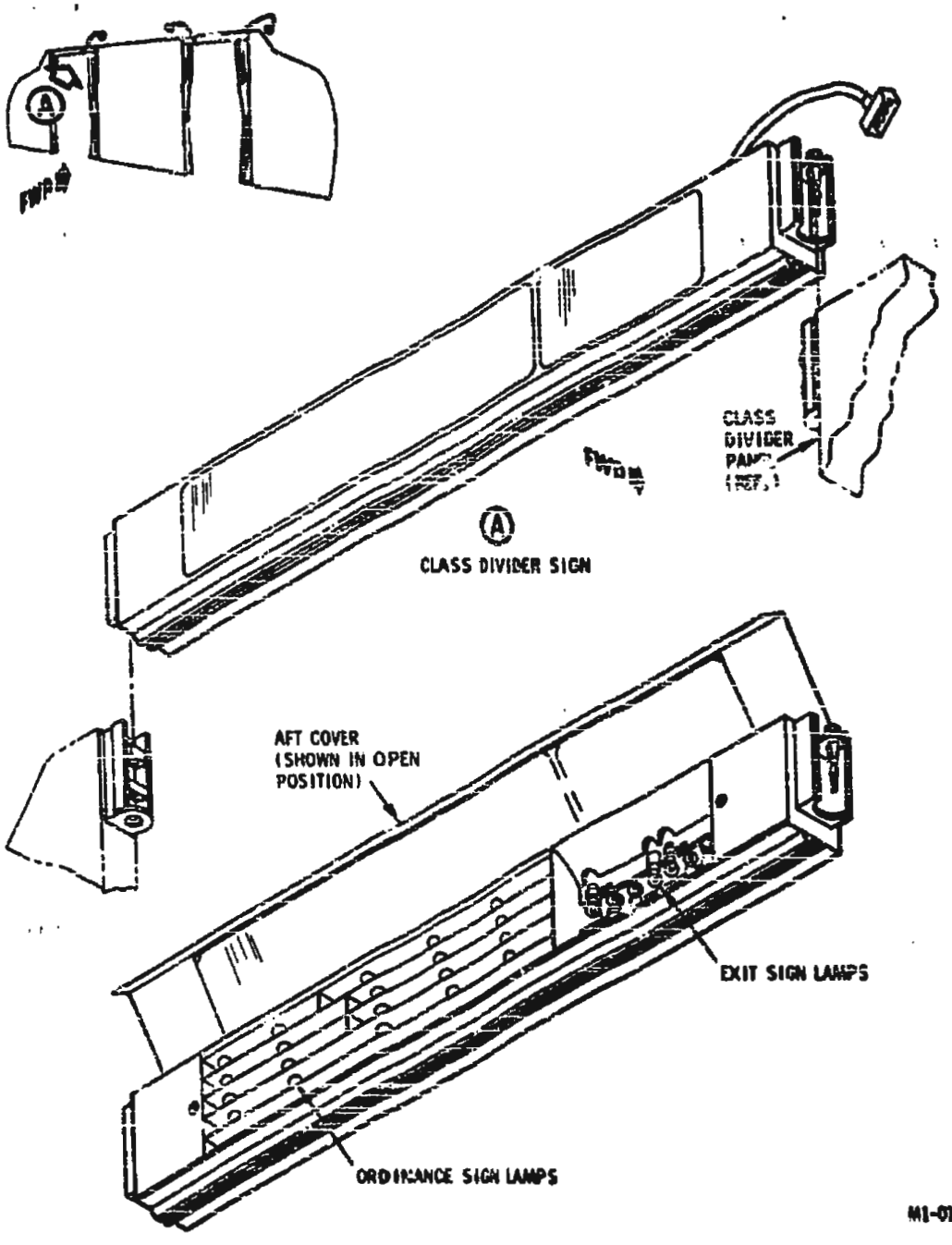
B. Installation

(1) Verify that circuit breakers opened in Step 2A(1) are open and tagged.

(2) Position class divider sign in adjacent brackets at each end.

(3) Secure sign with bolts at each end.

(4) Reconnect electrical connectors disconnected in Step 2A(2).



R
R Class Divider Sign - Removal and Installation
Figure 401

(5) Remove tags and close circuit breakers opened in Step 2A(1).

3. Relamping

A. Class Divider Sign

(1) Open aft section of sign lens.

(2) Remove faulty lamp.

(3) Install replacement lamp.

(4) Turn on electrical power (Ref. 24-41-00).

(5) Turn on sign to test lamp. Turn sign off after test.

(6) Turn off electrical power (Ref. 24-41-00).

(7) Close sign lens.

PENDANT ORDINANCE SIGN - REMOVAL AND INSTALLATION

1. Referenced Procedure

24-41-00 External Power/Ground Service System - Maintenance Practices

2. Removal/Installation

A. Removal

Circuit Breakers
Table 401

PENDANT ORDINANCE SIGN LOCATION	ORDINANCE SIGNS NO SMOKING LH ORDINANCE SIGNS FASTEN SEAT BELTS LH
Zone 230	ORDINANCE SIGNS NO SMOKING RH
Zone 250	ORDINANCE SIGNS NO SMOKING LH ORDINANCE SIGNS FASTEN SEAT BELTS LH SEAT CUSHION USE FOR FLOTATION AFT
Zone 260 (aft sign)	ORDINANCE SIGNS NO SMOKING RH ORDINANCE SIGNS FASTEN SEAT BELTS RH

(2) Engage screwdriver in slot of sign-lens release cam and turn cam to release sign lens. Repeat operation at opposite end of sign. Grasp sign lens and pull out to remove lens (Ref. Fig. 401).

(3) Remove and tag wires to terminal block.

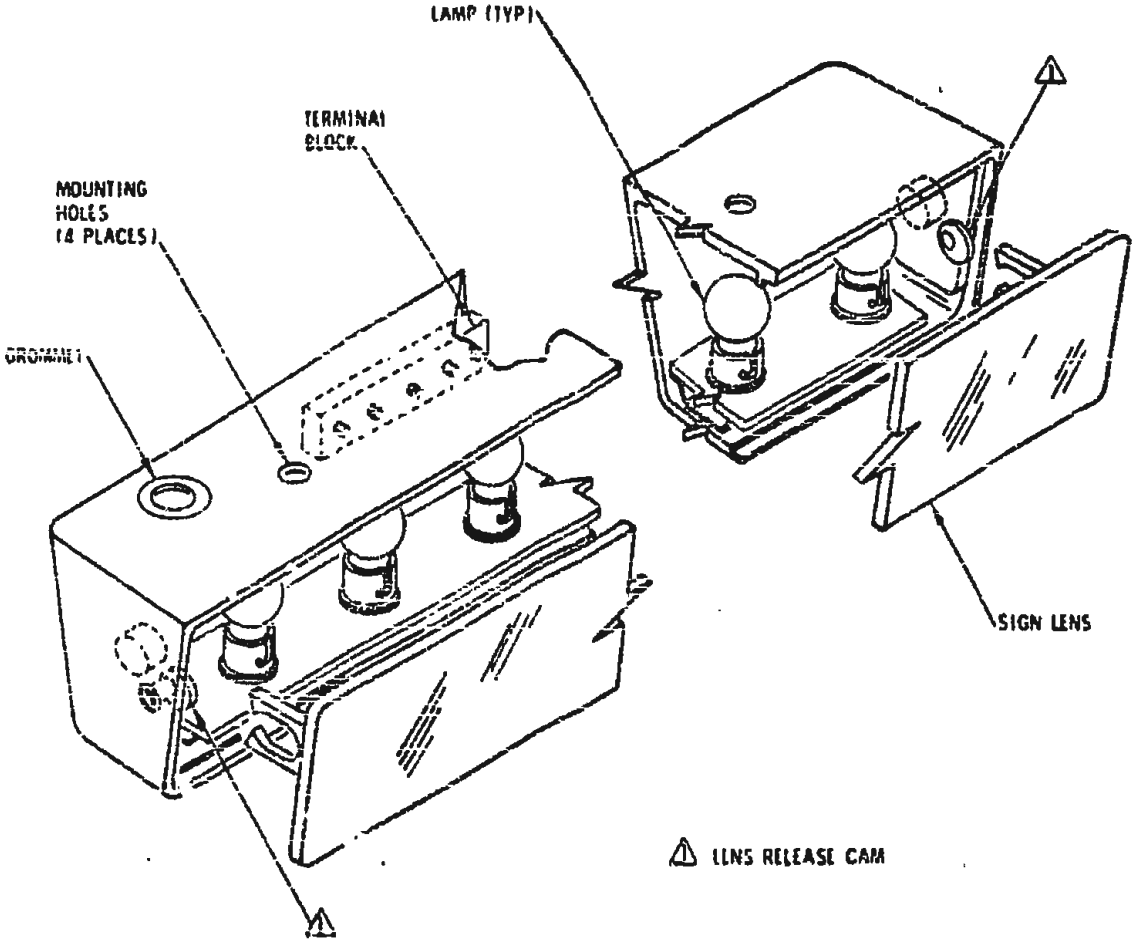
(4) Remove screws securing sign to ceiling.

(5) Remove sign while withdrawing wires through grommet.

B. Installation

(1) Verify that circuit breakers opened in Step 2A(1) are open and tagged.

(2) Feed wires through grommet and position sign. Secure sign with screws.



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M1-0105-33-096

Pendant Ordinance Sign - Removal and Installation
Figure 401

(3) Connect wires to terminal block and remove wire tags.

(4) Press sign lens into place.

(5) Remove tags and close circuit breakers opened in Step 2A(1).

3. Relamping

A. Pendant Ordinance Sign

(1) Engage screwdriver in slot of sign-lens release cam and turn cam to release sign lens. Repeat operation at opposite end of sign. Grasp sign lens and pull out.

(2) Remove faulty lamp.

(3) Install replacement lamp.

(4) Turn on electrical power (Ref. 24-41-00).

(5) Turn on NO SMOKING, FASTEN SEAT BELT signs, as applicable, to test lamp. Turn signs off after test.

(6) Turn off electrical power (Ref. 24-41-00).

(7) Press sign lens into place.

PENDANT-MOUNTED EXIT LOCATOR SIGN - REMOVAL AND INSTALLATION

1. Referenced Procedure

   24-41-00 External Power/Ground Service System - Maintenance Practices

2. Removal/Installation

   A. Removal

      (1) On galley right circuit breaker panel, zone 130, open and tag circuit EXIT SIGNS - DOOR - FWD or AFT as applicable.

      On FLIGHT ENGINEER/SECOND OFFICERS overhead circuit breaker panel CB2, zone 215, open and tag PASSENGER SERVICE - HOST ADVSY IND (G11).

      (2) Depress release button on each end of sign assembly and slide sign cover down (Ref. Fig. 401).

      (3) Remove screws securing housing assembly.

      (4) Pull housing assembly down sufficiently to gain access to terminal block.

      (5) Remove terminal block cover. Remove and tag wires to terminal block and remove housing assembly.

   B. Installation

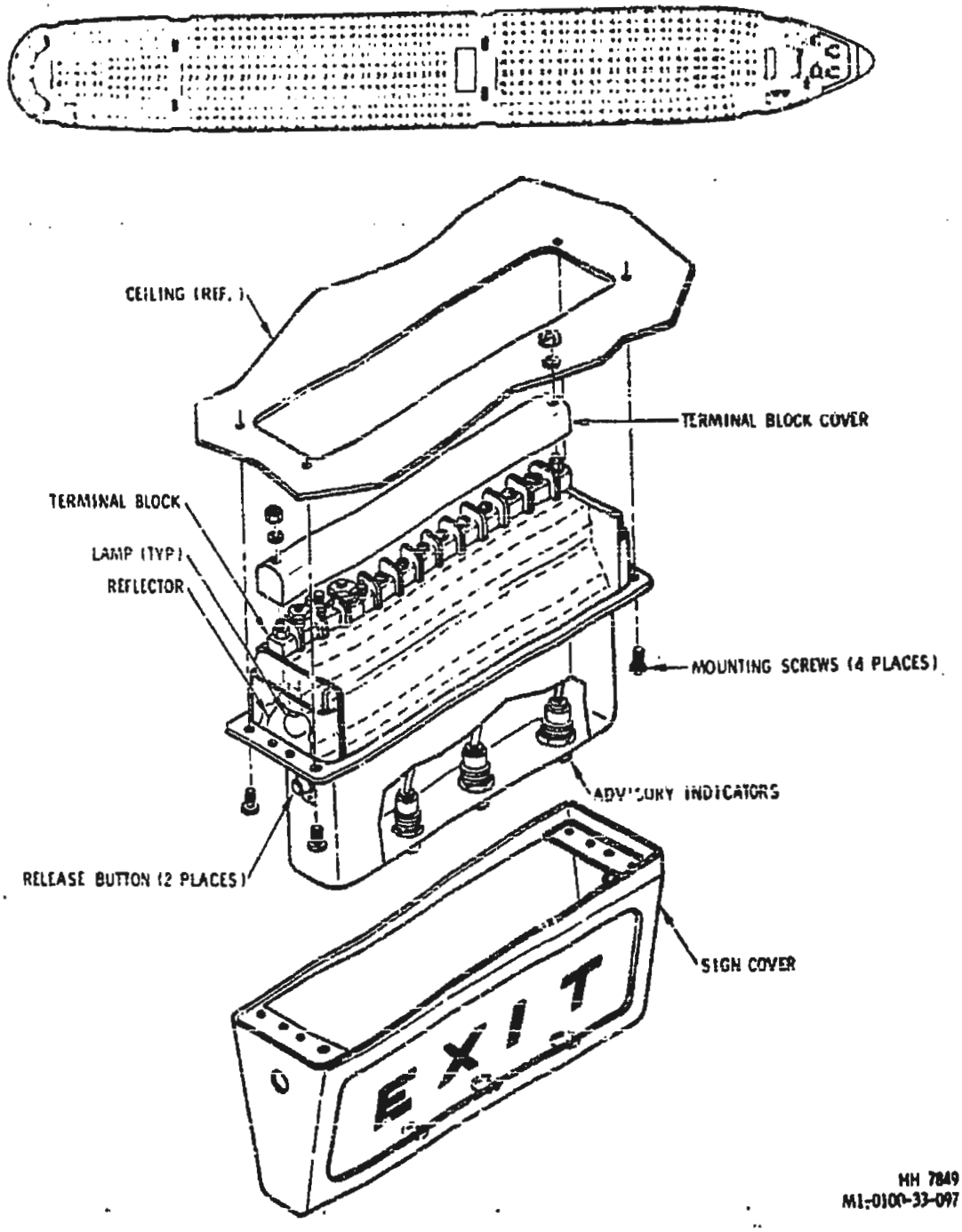
      (1) Verify that circuit breakers opened in Step 2A(1) are open and tagged.

      (2) Support housing assembly, attach wires to terminals of terminal block, and remove wire tags. Install terminal block cover.

      (3) Insert housing assembly and secure in place with mounting screws.

      (4) Install cover on housing assembly and verify that release buttons engage cover.

      (5) Remove tags and close circuit breakers opened in Step 2A(1).



R Pendant-mounted Exit Locator Sign Removal and Installation
R Figure 401

3. Relamping

A. Exit Sign

(1) Depress release button on each side of sign assembly and slide sign cover down.

(2) Remove faulty lamp.

(3) Install replacement lamp.

(4) Turn on electrical power (Ref. 24-41-00).

(5) Turn on NO SMOKING signs to test lamp. Turn signs off after test.

(6) Turn off electrical power (Ref. 24-41-00).

(7) Install cover on housing assembly and verify that release buttons engage cover.

B. Advisory Indicator

(1) Unscrew cap of advisory indicator and remove lamp from cap.

(2) Insert new lamp into cap and screw cap into socket of advisory indicator.

DOOR EXIT SIGN - REMOVAL AND INSTALLATION

1. Referenced Procedures

24-41-00 External Power/Ground Service System - Maintenance Practices

2. Removal/Installation

A. Removal

(1) On galley right circuit breaker panel, zone 130, open and tag circuit breaker EXIT SIGNS-DOOR-FWD or AFT as applicable.

(2) Grasp EXIT sign cover and pull to remove.

(3) Tag and remove wiring to terminals of sign.

(4) Remove mounting screws from rear of sign.

(5) Remove sign.

B. Installation

(1) Verify that circuit breakers opened in Step 2A(1) are opened and tagged.

(2) Insert wiring through grommet and position sign in place against trim.

(3) Install mounting screws from rear of trim and secure sign.

(4) Connect wiring to terminals and remove wire tags.

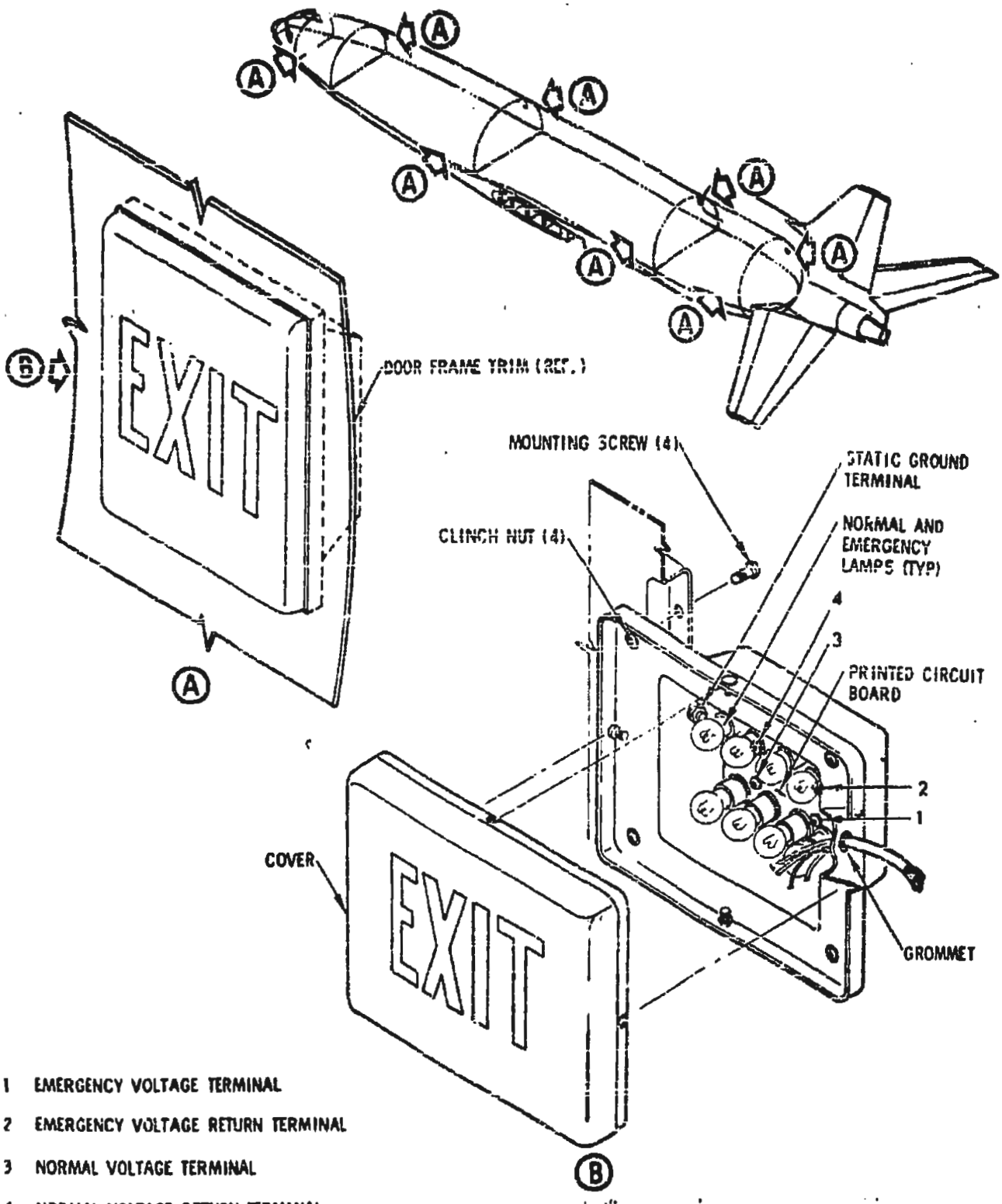
(5) Install cover.

(6) Remove tags and close circuit breakers opened in Step 2A(1).

3. Relamping

A. Door EXIT Sign

(1) Grasp EXIT sign cover and pull out to remove (Ref. Fig. 401).



1 EMERGENCY VOLTAGE TERMINAL

2 EMERGENCY VOLTAGE RETURN TERMINAL

3 NORMAL VOLTAGE TERMINAL

4 NORMAL VOLTAGE RETURN TERMINAL

MI-0001-33-098

R
R

Door Exit Sign - Removal and Installation
Figure 401

EFFECTIVITY: ALL

001B

(2) Remove faulty lamp.

(3) Install replacement lamp.

(4) Turn on electrical power (Ref. 24-41-00).

(5) Turn on NO SMOKING signs to test lamp. Turn signs off after test.

(6) Turn off electrical power (Ref. 24-41-00).

(7) Install cover.

LAVATORY OCCUPIED - NO SMOKING - FASTEN SEAT BELTS ORDINANCE SIGN REMOVAL AND INSTALLATION

1. Referenced Procedures

33-27-00 Lavatory Lighting - Adjustment and Test

33-29-00 Sign Lighting - Adjustment and Test

2. Removal/Installation

A. Removal

R (1) On galley right circuit breaker panel, zone 130, open and tag the following circuit breakers:

ORDINANCE SIGNS

NO SMOKING - LH or RH

FASTEN SEAT BELTS - LH or RH

SIGNS - LAV OCC - FWD

(2) At each end of the housing turn lens release cam until lens protrudes (Ref. Fig. 401).

(3) Remove lens.

(4) Release quarter-turn fasteners on printed circuit board.

(5) Remove terminal block cover.

(6) Tag and remove wiring.

(7) Remove screws securing sign to ceiling, remove sign.

B. Installation

(1) Verify that circuit breakers opened in Step 2A(1) are open and tagged.

(2) Position sign on ceiling panel and secure with screws.

(3) Connect wiring to terminal block and remove tags.

(4) Install terminal block cover.

(5) Position printed circuit board in housing and secure with quarter-turn fasteners.

(6) Install lens.

(7) Remove tags and close circuit breakers opened in Step 2A(1).

(8) Test the sign function by performing the applicable portions of the lavatory lighting operational test (Ref. 33-27-00) and the sign lighting operational test (Ref. 33-29-00).

3. Relamping

A. Ordinance Sign

(1) Verify that the NO SMOKING and FASTEN SEAT BELTS switchlights on the eyebrow panel, zone 210, are depressed to the off position and that circuit breakers in Step 2 A(1) are open and tagged.

(2) Verify that the MASTER LAV switchlight on the forward attendants panel is depressed to the off position.

(3) At each end of housing turn lens release cam until lens protrudes (Ref. Fig. 401).

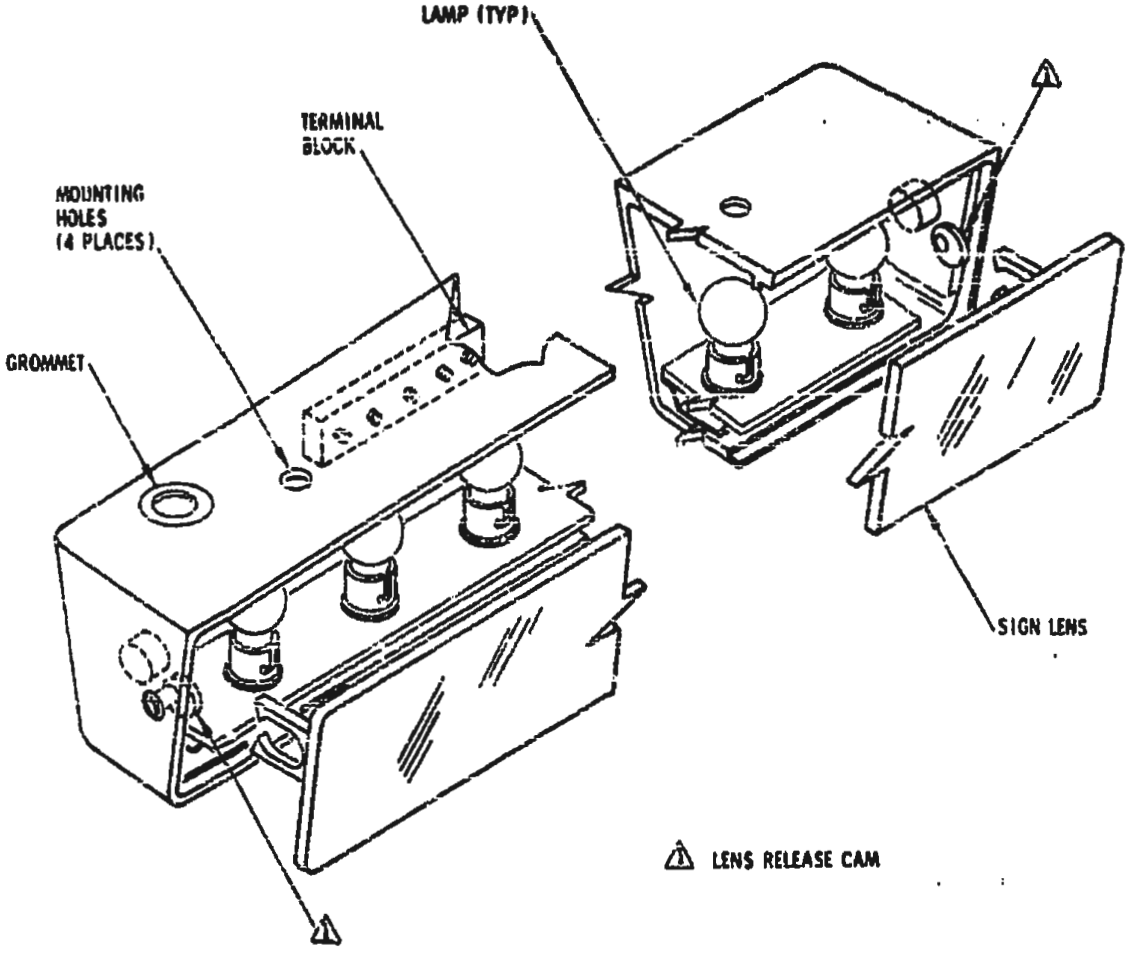
(4) Remove lens.

(5) Remove faulty lamp.

(6) Insert replacement lamp into clip.

(7) Press sign lens into sign housing.

(8) Test lamps by performing applicable portions of the lavatory lighting operational test (Ref. 33-27-00) and the sign lighting operational test (Ref. 33-29-00).



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R Pendant Mounted - Ordinance Sign Removal and Installation
R Figure 401

EFFECTIVITY: ALL

001B

R WALL MOUNTED ORDINANCE SIGN
R SUPPLY REMOVAL AND INSTALLATION

R 1. Referenced Procedures

R 33-29-00 Sign Lighting - Adjustment and Test

R 2. Removal/Installation

R A. Removal

R (1) On galley right circuit breaker panel, zone 130, open
R and tag the following circuit breakers:

R ORDINANCE SIGNS

R NO SMOKING-LH OR RH

R FASTEN SEAT BELTS-LH OR RH

R (2) Locate sign OUTSIDE forward lavatory partition (LH or
R RH).

R (3) Depress button at each end of sign cover (Ref. Fig.
R 401).

R (4) Remove cover.

R (5) Release three (3) quarter-turn fasteners at top of
R printed circuit board, allowing it to swing down on
R hinged bottom.

R (6) Slide terminal board cover off to expose connections.

R (7) Remove and tag terminal connections.

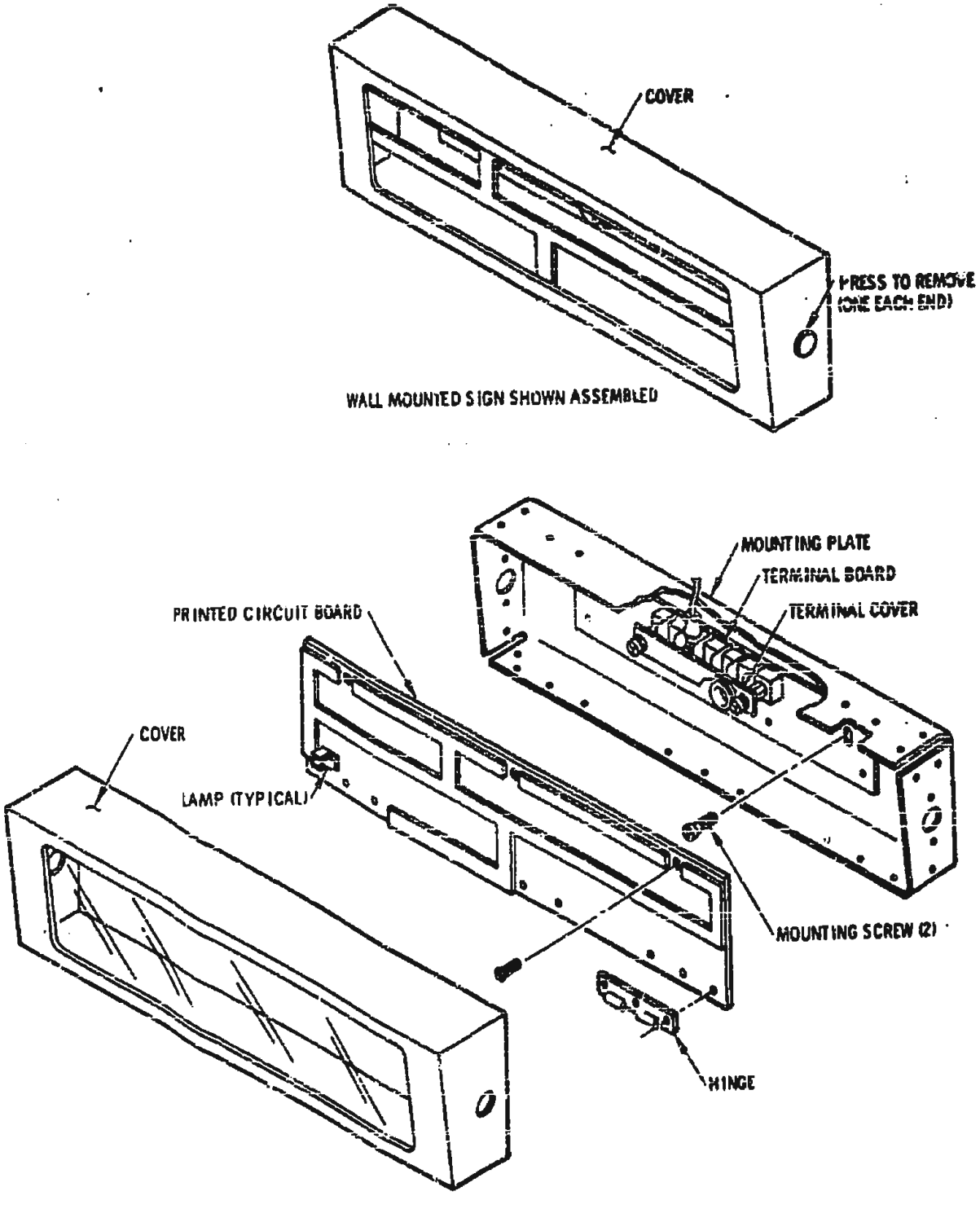
R (8) While supporting sign housing, remove two (2) mounting
R screws from rear of sign.

R (9) Remove housing while feeding wires through grommet.

R B. Installation

R (1) Verify circuit breakers opened in Step 2A(1) are open
R and tagged.

R (2) Position sign housing on wall while feeding aircraft
R wiring through grommet at rear of housing.



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Wall Mounted Ordinance Sign
Removal and Installation
Figure 401

R (3) Secure sign housing to wall with two mounting screws.

R (4) Connect wiring to terminal block and remove tags.

R (5) Slide terminal block cover in place.

R (6) Secure printed circuit board at top with quarter-turn
R fasteners.

R (7) Place sign cover on housing.

R (8) Test sign function by performing Operational Test (Ref.
R 33-29-00, 501).

R 3. Relamping

R A. Ordinance Sign

R (1) Verify that the NO SMOKING and FASTEN SEAT BELTS
R switchlights on the eyebrow panel are depressed to the
R off position and that circuit breakers in Step 2A(1)
R and 2A(2) are open and tagged.

R (2) Depress release buttons at each end of sign cover.

R (3) Remove cover.

R (4) Remove faulty lamp from holder.

R (5) Insert replacement lamp.

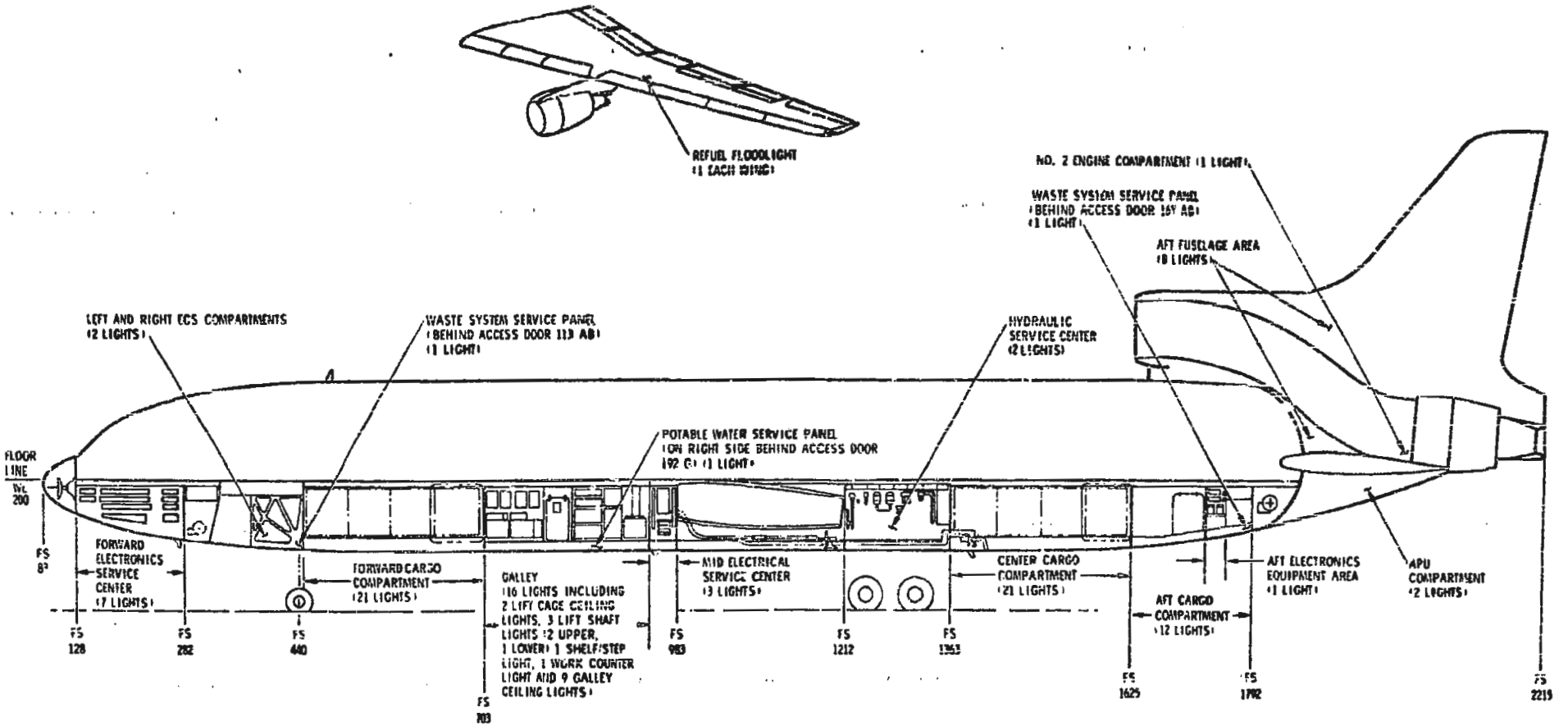
R (6) Replace sign cover.

R (7) Test lamp by performing Sign Lighting Operational Test
R (Ref. 33-29-00,501).

CARGO AND SERVICE COMPARTMENTS - DESCRIPTION AND OPERATION

1. General

R Cargo and service compartment illumination includes all cargo compartment lighting, service compartment lighting, and wheel well lighting. Automatic and manual switching is used to control the lights. The location of the cargo and service areas and the distribution of lights is shown in Figure 1.



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Cargo and Service Compartment Lighting
Figure 1

R
R
001B

EFFECTIVITY: ALL

CARGO COMPARTMENT LIGHTING - DESCRIPTION AND OPERATION

1. General

In each cargo compartment, recessed light fixtures are installed in the ceiling and the cargo loading door. The light in the aft electronic equipment area is also included in the aft cargo compartment lighting circuit.

2. Operation

The cargo compartment lights are turned on by a control relay for each compartment (Ref. Fig. 1). The control relay is energized automatically when the cargo door is opened, or
R manually by a toggle switch at the door. The door closed
R position switches are in parallel with the manual switches. The toggle switch circuits are interlocked through air/ground sensing relay No. 8 to remove power from the cargo compartment lights when the aircraft is airborne.

3. Cargo Ceiling Light

A. Description and Operation

Each ceiling-mounted light fixture is equipped with four clear heat-absorbing lenses and an incandescent lamp (Ref. Fig. 2). A spherical reflector is mounted beneath the lamp to project the light into a parabolic reflector shaped to illuminate a 4-foot square area of the cargo floor. An autotransformer incorporated into each light fixture steps down the supply voltage to 26.5V ac for application to the lamps.

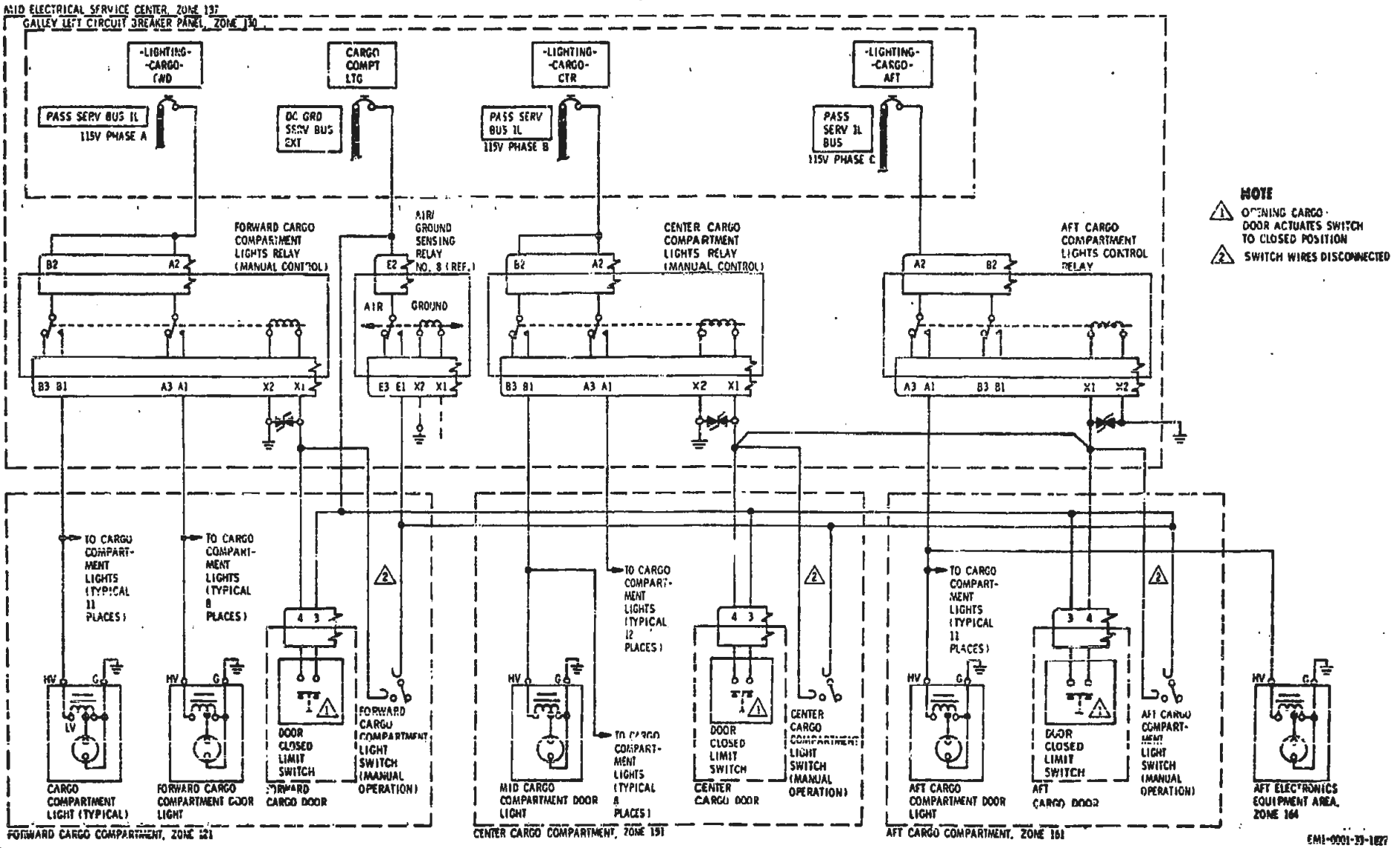
4. Cargo Door Light

A. Description and Operation

Each light assembly recessed into the cargo door contains a quartz lamp (Ref. Fig. 5). An elliptical reflector behind the lamp projects the light through a clear lens which is stippled on its inner surface to diffuse the light over a wide area.

The supply voltage is stepped down to 8.3V ac for the lamp by an autotransformer in the light fixture.

On aircraft 032-999,
the cargo door lights are connected in series with a cam operated door open limit switch in the door actuator assembly to prevent illumination of the lights before the door is fully open.

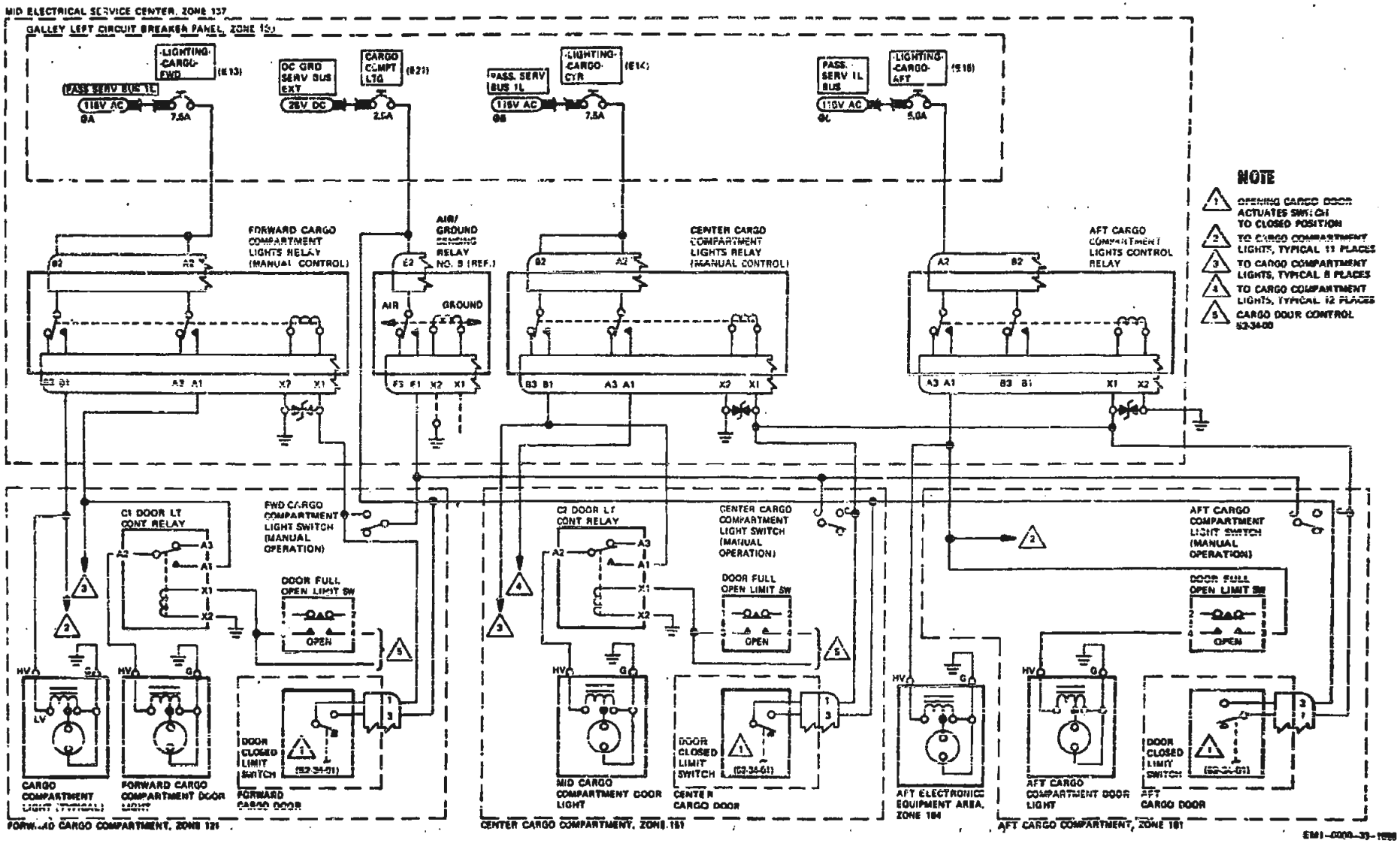

MID ELECTRICAL SERVICE CENTER, ZONE 131
GALLEY LEFT CIRCUIT BREAKER PANEL, ZONE 130
-LIGHTING- -CARGO- FWD
CARGO COMPT LTG
-LIGHTING- -CARGO- CTR
-LIGHTING- -CARGO- AFT
PASS SERV BUS 1L
115V PHASE A
DC GRD SERV BUS EXT
PASS SERV BUS 1L
115V PHASE B
PASS SERV 1L BUS
115V PHASE C
FORWARD CARGO COMPARTMENT LIGHTS RELAY (MANUAL CONTROL)
AIR/ GROUND SENSING RELAY NO. 8 (REF.)
CENTER CARGO COMPARTMENT LIGHTS RELAY (MANUAL CONTROL)
AFT CARGO COMPARTMENT LIGHTS CONTROL RELAY
B2 A2
E2
A1R GROUND
B3 B1 A3 A1 X2 X1
E3 E1 X2 X1
A3 A1 B3 B1 X1 X2
NOTE
1 OPENING CARGO DOOR ACTUATES SWITCH TO CLOSED POSITION
2 SWITCH WIRES DISCONNECTED
TO CARGO COMPARTMENT LIGHTS (TYPICAL 11 PLACES)
TO CARGO COMPARTMENT LIGHTS (TYPICAL 8 PLACES)
TO CARGO COMPARTMENT LIGHTS (TYPICAL 12 PLACES)
TO CARGO COMPARTMENT LIGHTS (TYPICAL 8 PLACES)
TO CARGO COMPARTMENT LIGHTS (TYPICAL 11 PLACES)
HV G
LV
4 3
3 4
DOOR CLOSED LIMIT SWITCH
FORWARD CARGO COMPARTMENT LIGHT SWITCH (MANUAL OPERATION)
CENTER CARGO COMPARTMENT LIGHT SWITCH (MANUAL OPERATION)
AFT CARGO COMPARTMENT LIGHT SWITCH (MANUAL OPERATION)
CARGO COMPARTMENT LIGHT (TYPICAL)
FORWARD CARGO COMPARTMENT DOOR LIGHT
FORWARD CARGO DOOR
MID CARGO COMPARTMENT DOOR LIGHT
CENTER CARGO DOOR
AFT CARGO COMPARTMENT DOOR LIGHT
AFT (CARGO) DOOR
AFT ELECTRONICS EQUIPMENT AREA, ZONE 164
FORWARD CARGO COMPARTMENT, ZONE 121
CENTER CARGO COMPARTMENT, ZONE 151
AFT CARGO COMPARTMENT, ZONE 161
EMI-0001-33-1827

CR CR

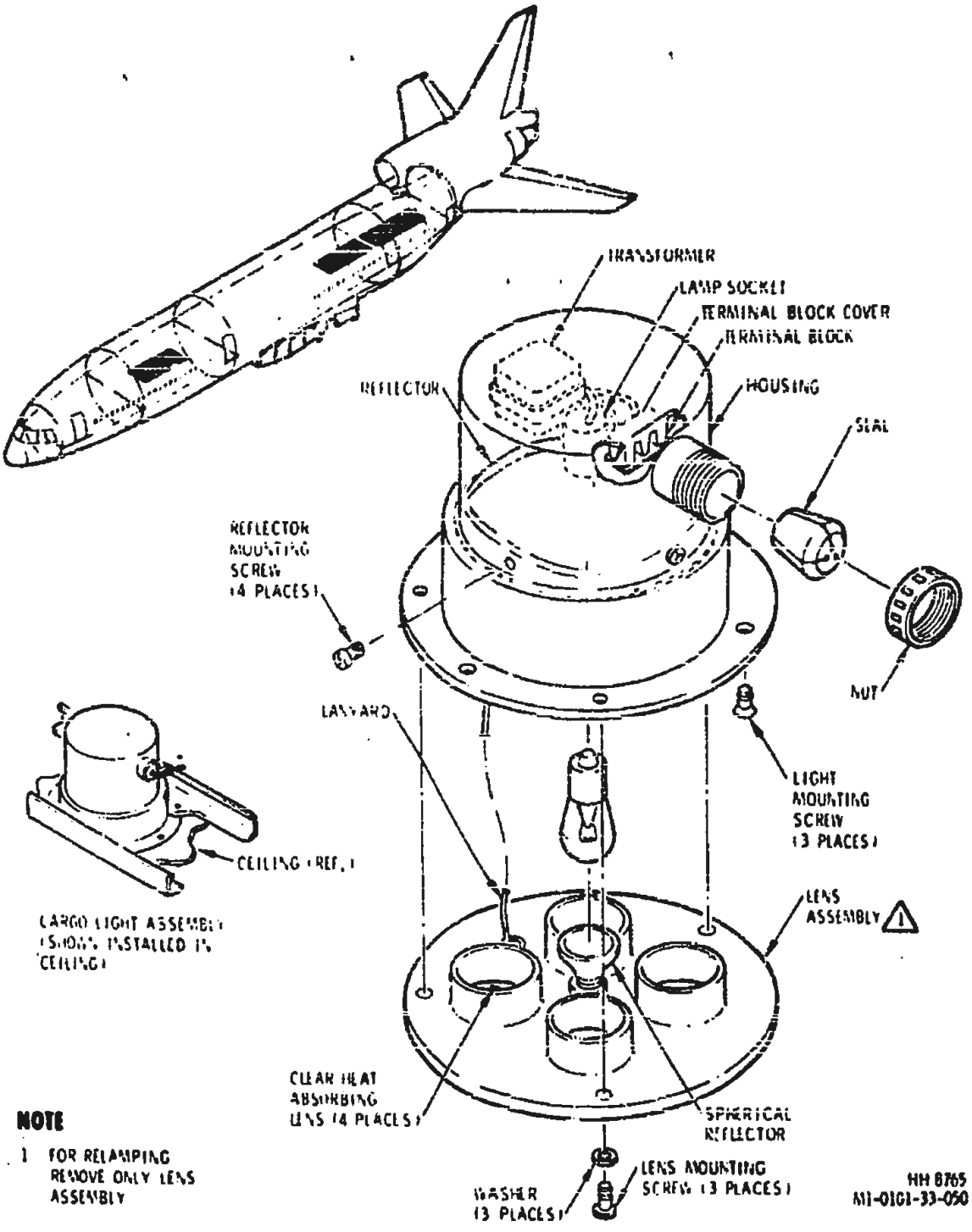
Cargo Compartment Lighting Schematic
Figure 1

EFFECTIVITY: 001-031

001B


MID ELECTRICAL SERVICE CENTER, ZONE 137
GALLEY LEFT CIRCUIT BREAKER PANEL, ZONE 131
LIGHTING-CARGO-FWD (E13)
PASS SERV BUS 1L
115V AC
9A
7.5A
DC GRD SERV BUS EXT
28V DC
CARGO COMPT LTG (E21)
2.5A
PASS. SERV BUS 1L
LIGHTING-CARGO-CTR (E14)
115V AC
9B
7.5A
PASS. SERV 1L BUS
LIGHTING-CARGO-AFT (E15)
115V AC
9C
5.0A
FORWARD CARGO COMPARTMENT LIGHTS RELAY (MANUAL CONTROL)
AIR/GROUND SENSING RELAY NO. 5 (REF.)
AIR
GROUND
CENTER CARGO COMPARTMENT LIGHTS RELAY (MANUAL CONTROL)
AFT CARGO COMPARTMENT LIGHTS CONTROL RELAY
NOTE
1 OPENING CARGO DOOR ACTUATES SW1 OR TO CLOSED POSITION
2 TO CARGO COMPARTMENT LIGHTS, TYPICAL 11 PLACES
3 TO CARGO COMPARTMENT LIGHTS, TYPICAL 8 PLACES
4 TO CARGO COMPARTMENT LIGHTS, TYPICAL 12 PLACES
5 CARGO DOOR CONTROL 52-34-00
C1 DOOR LT CONT RELAY
FWD CARGO COMPARTMENT LIGHT SWITCH (MANUAL OPERATION)
DOOR FULL OPEN LIMIT SW
OPEN
DOOR CLOSED LIMIT SWITCH
(52-34-01)
FORWARD CARGO DOOR
CARGO COMPARTMENT LIGHT (TYPICAL)
FORWARD CARGO COMPARTMENT DOOR LIGHT
FORWARD CARGO COMPARTMENT, ZONE 126
C2 DOOR LT CONT RELAY
CENTER CARGO COMPARTMENT LIGHT SWITCH (MANUAL OPERATION)
MID CARGO COMPARTMENT DOOR LIGHT
CENTER CARGO DOOR
CENTER CARGO COMPARTMENT, ZONE 151
AFT CARGO COMPARTMENT LIGHT SWITCH (MANUAL OPERATION)
AFT ELECTRONIC EQUIPMENT AREA, ZONE 194
AFT CARGO COMPARTMENT DOOR LIGHT
AFT CARGO DOOR
AFT CARGO COMPARTMENT, ZONE 161

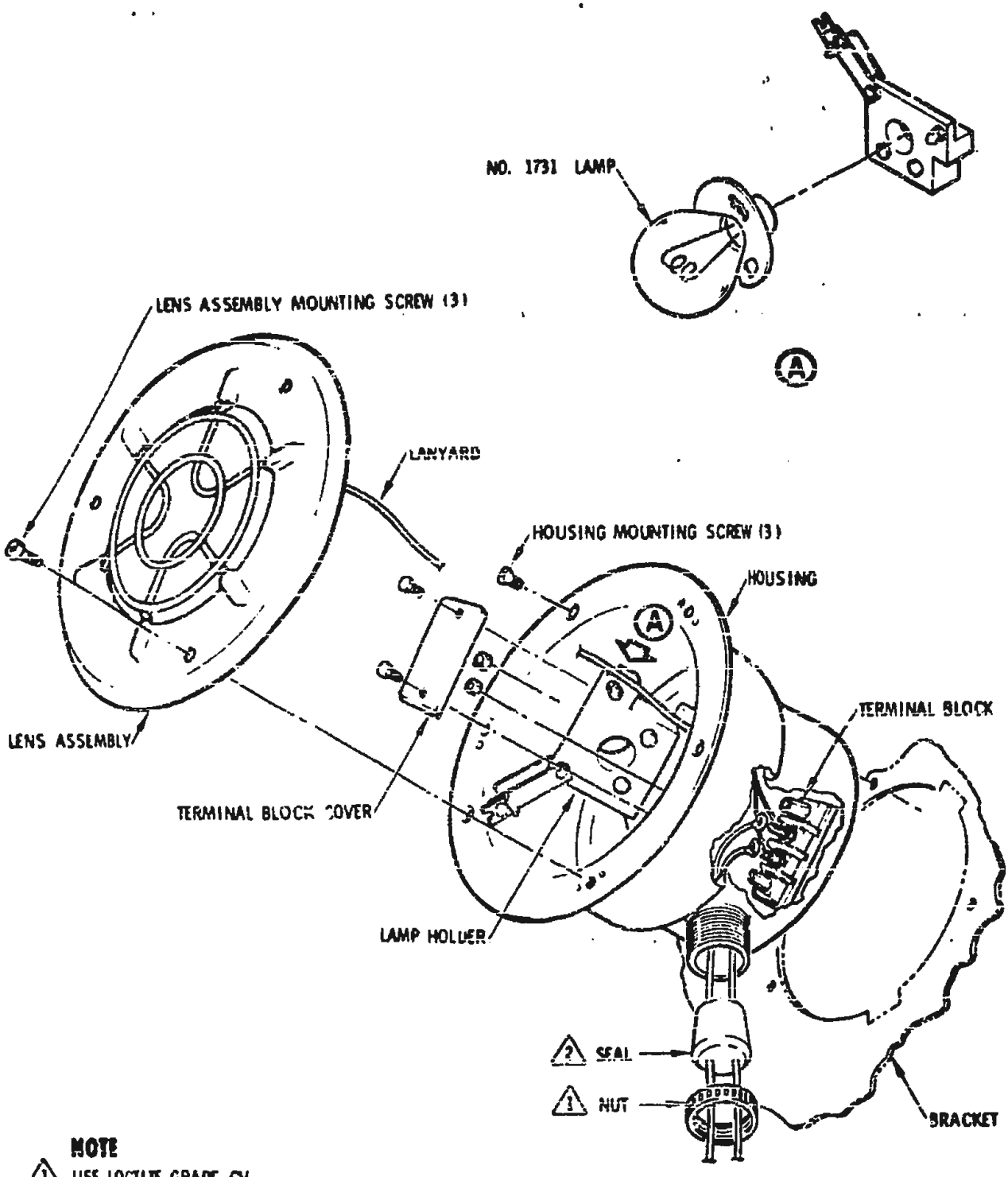
CR Cargo Compartment Lighting Schematic
CR Figure 1



NOTE

1 FOR RELAMPING REMOVE ONLY LENS ASSEMBLY

Cargo Compartment Light
Figure 2



NOTE

1. USE LOCTITE GRADE CV
2. ON INSTALLATION INSURE ELECTRICAL CONNECTOR IS POINTING DOWN

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CR
CR

Cargo Door Light
Figure 3

R EFFECTIVITY: ALL
R
0018

CARGO COMPARTMENT LIGHTING - ADJUSTMENT AND TEST

1. Referenced Procedure

24-41-00 External Power/Ground Service System - Maintenance Practices

2. Adjustment/Test

A. Operational Test

(1) Turn on electrical power (Ref. 24-41-00).

(2) On galley left circuit breaker panel, zone 130, verify that the following circuit breakers are closed:

DC GRD SERV BUS EXT:

CARGO COMPT LTG (E21)

R PASS SERV BUS 1L:

LIGHTING - CARGO - FWD (E13)

LIGHTING - CARGO -CTR (E14)

LIGHTING - CARGO -AFT (E15)

R (3) Open the forward, center, or aft cargo door and enter
R the cargo compartment.

R (4) On aircraft 001-031 without SB33-054,
R close the cargo door and verify that all cargo ceiling
R and door light(s) go out as the cargo door is fully
R closed.

R (4) On aircraft 001-031 with SB33-054 and 032-999,
R close the cargo door and verify that cargo door
R light(s) go out as soon as door leaves the full open
R position. Cargo ceiling lights go out as door is fully
R closed.

R (5) On aircraft 001-031 without SB33-054,
R place the CARGO AREA LTS switch to the on position.
R Verify cargo ceiling and door light(s) do not come on.

R NOTE: CARGO AREA LTS switch has been disconnected.

R (5) On aircraft 001-031 with SB33-054 and 032-999,
R place the CARGO AREA LTS switch to the on position.
R Verify that cargo ceiling lights come on.

R NOTE: Cargo door light(s) must not come on.

R (6) On aircraft 001-031 without SB33-054,
R place the CARGO AREA LTS switch to the off position.

R (6) On aircraft 001-031 with SB33-054 and 032-999,
R place the CARGO AREA LTS switch to the off position.
R Verify that cargo ceiling lights go out.

R (7) On aircraft 001-031 without SB33-054,
R open the cargo door and verify that cargo ceiling and
R door light(s) come on as door begins to open.

R (7) On aircraft 001-031 with SB33-054 and 032-999,
R open the cargo door and verify that all cargo ceiling
R and door light(s) come on as soon as the door reaches
R the full open position.

R (8) Turn off electrical power (Ref. 24-41-00).

CARGO COMPARTMENT LIGHTS - REMOVAL AND INSTALLATION

1. Referenced Procedure

24-41-00 External Power/Ground Service System - Maintenance Practices

2. Removal/Installation

A. Removal

(1) R R On galley left circuit breaker panel, zone 130, open and tag the following circuit breakers LIGHTING - CARGO - FWD (E13), LIGHTING - CARGO - CTR (E14), or LIGHTING - CARGO - AFT (E15).

(2) Remove lens and allow to hang by lanyard (Ref. Fig. 401).

(3) Remove lamp.

(4) Remove screws securing light to overhead structure.

(5) Lower light to gain access to screws securing reflector.

(6) Remove screws and reflector to gain access to terminal block.

(7) Remove terminal block cover.

(8) Remove and tag wires on terminal block.

(9) Unscrew connector seal nut from housing and withdraw wiring.

(10) Remove cargo light assembly.

B. Installation

(1) Verify that circuit breaker opened in Step 2A(1) is open and tagged.

(2) Feed wires into housing and secure seal and nut.

(3) Remove tags and connect wires to terminal block.

(4) Install terminal block cover.

(5) Install reflector and secure with screws.

(6) Install cargo light to overhead structure and secure with screws.

(7) Install lamp.

(8) Position lens on cargo light and secure with screws.

(9) Remove tag and close circuit breaker opened in Step 2A(1).

3. Relamping

A. Cargo Compartment Light

(1) Turn cargo lights off by operating toggle switch or by opening circuit breaker [Ref. Step 2A(1)].

(2) Remove lens-retaining screws and allow lens to hang by lanyard.

(3) Remove faulty lamp.

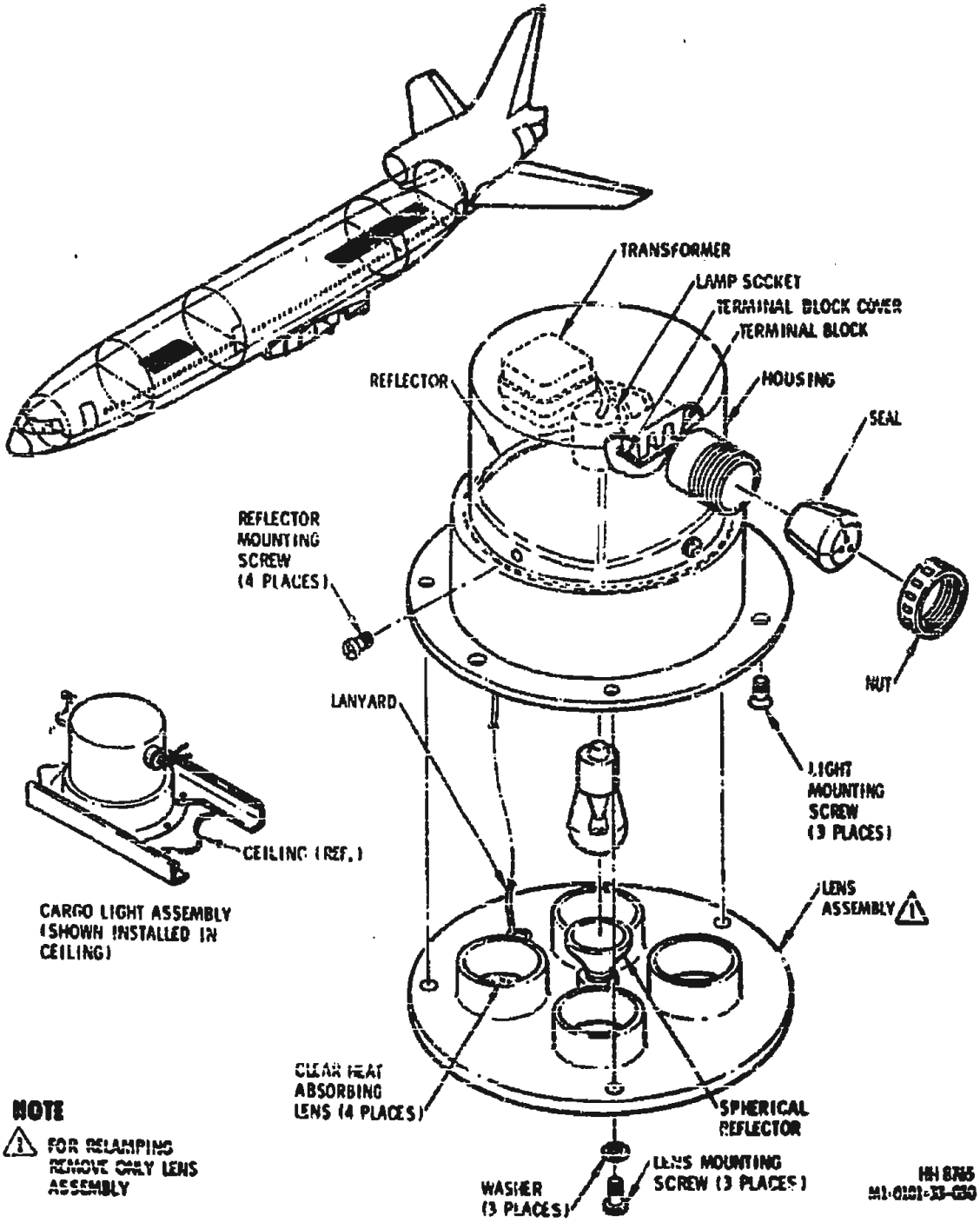
(4) Install replacement lamp.

(5) Turn on electrical power (Ref. 24-41-00).

(6) Turn on cargo lights to test lamp.

(7) Install lens.

(8) Turn off electrical power (Ref. 24-41-00).



R R Cargo Compartment Light - Removal and Installation
Figure 401

EFFECTIVITY: ALL

001B

CARGO LOADING DOOR LIGHT - REMOVAL AND INSTALLATION

1. Referenced Procedure

24-41-00 External Power/Ground Service System - Maintenance Practices

2. Removal/Installation

A. Removal

CR CR CR (1) On galley left circuit breaker panel, zone 130, open and tag the following circuit breakers - Lighting - Cargo - FWD (E13), CTR (E14), or AFT (E15).

(2) Remove screws, which secure light cover assembly to housing assembly, and allow light cover assembly to hang by lanyard (Ref. Fig. 401).

(3) Rotate lampholders outward and remove lamp.

(4) Remove screws securing light to door structure.

(5) Remove reflector to gain access to wiring.

(6) Disconnect and tag wires on terminal block.

(7) Unscrew connector seal nut from housing and withdraw wires.

B. Installation

(1) Verify that circuit breaker opened in Step 2A(1) is open and tagged.

(2) Feed wires into housing and secure seal and nut.

(3) Remove tags and connect wires to terminal block.

(4) Install reflector.

(5) Install light to door structure and secure with screws.

(6) Install lamp and rotate lampholders inward to secure lamp.

(7) Secure light cover assembly to housing assembly.

(8) Remove tag and close circuit breaker opened in Step 2A(1).

3. Relamping

A. Cargo Door Light

(1) Turn off cargo lights by opening circuit breaker [Ref. Step 2A(1)].

R R (2) Remove screws, which secure light cover assembly to housing assembly and allow light cover assembly to hang by lanyard (Ref. Fig. 401).

(3) Remove faulty lamp by rotating lampholders outward.

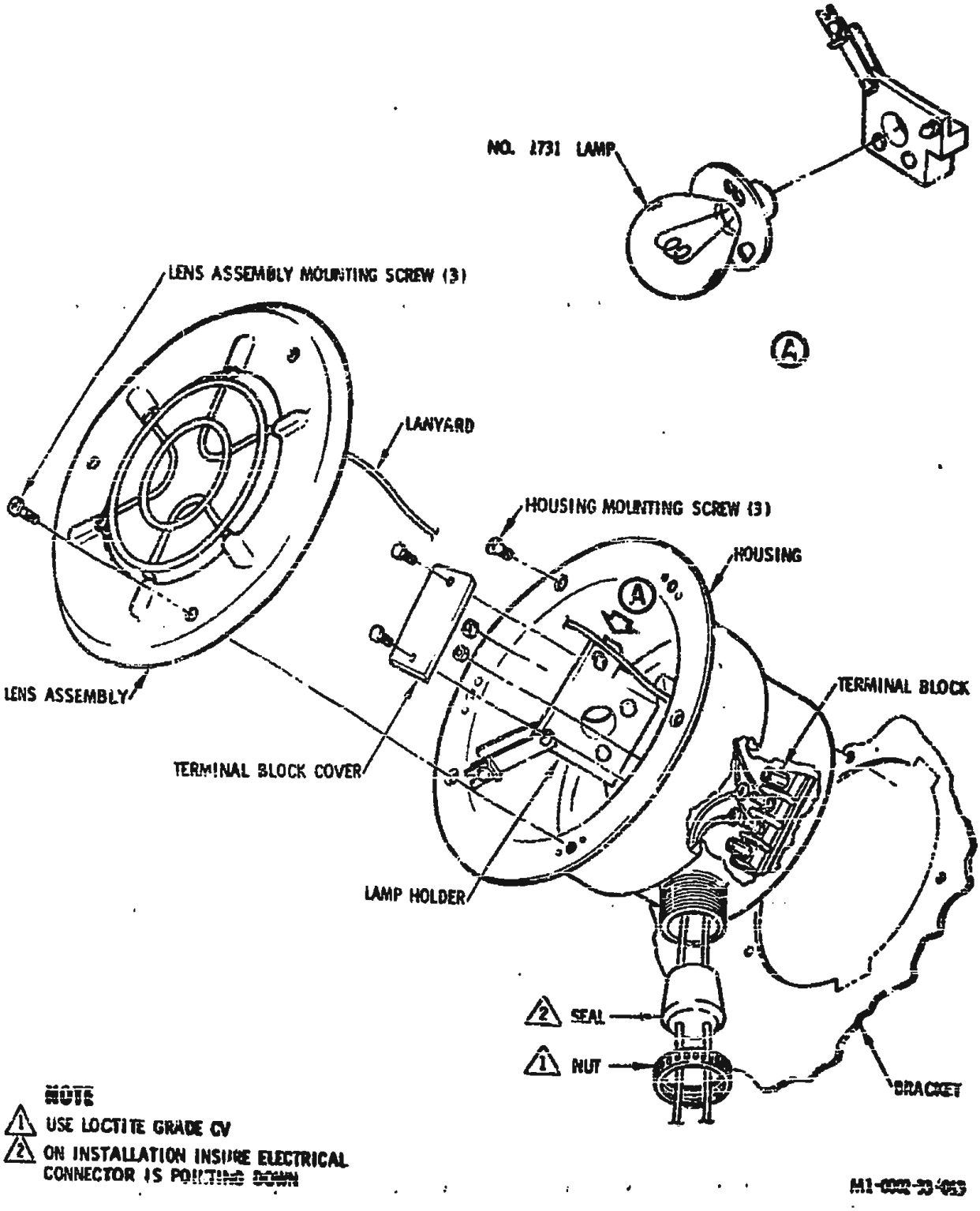
(4) Install replacement lamp and rotate lampholders inward.

(5) Turn on electrical power (Ref. 24-41-00).

(6) Turn on cargo lights to test lamp.

R (7) Secure light cover assembly to housing assembly.

(8) Turn off electrical power (Ref. 24-41-00).



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CR

Cargo Door Light - Removal and Installation
Figure 401

EFFECTIVITY: ALL

001B

SERVICE LIGHTING - DESCRIPTION AND OPERATION

1. General

Service lighting includes lights in the following areas:

Service compartments:

R Forward electronic service center (FESC)

R Environmental Control System (ECS) compartments

R Mid electrical service center (MESC)

Hydraulic service center

R Aft electronic equipment area (AEEA) (Ref. 33-31-00)

Aft fuselage and S-duct area

APU compartment

No. 2 engine compartment

Service panels:

Refueling and Defueling panels

Waste service panels

Potable water service panel

APU ground control panel

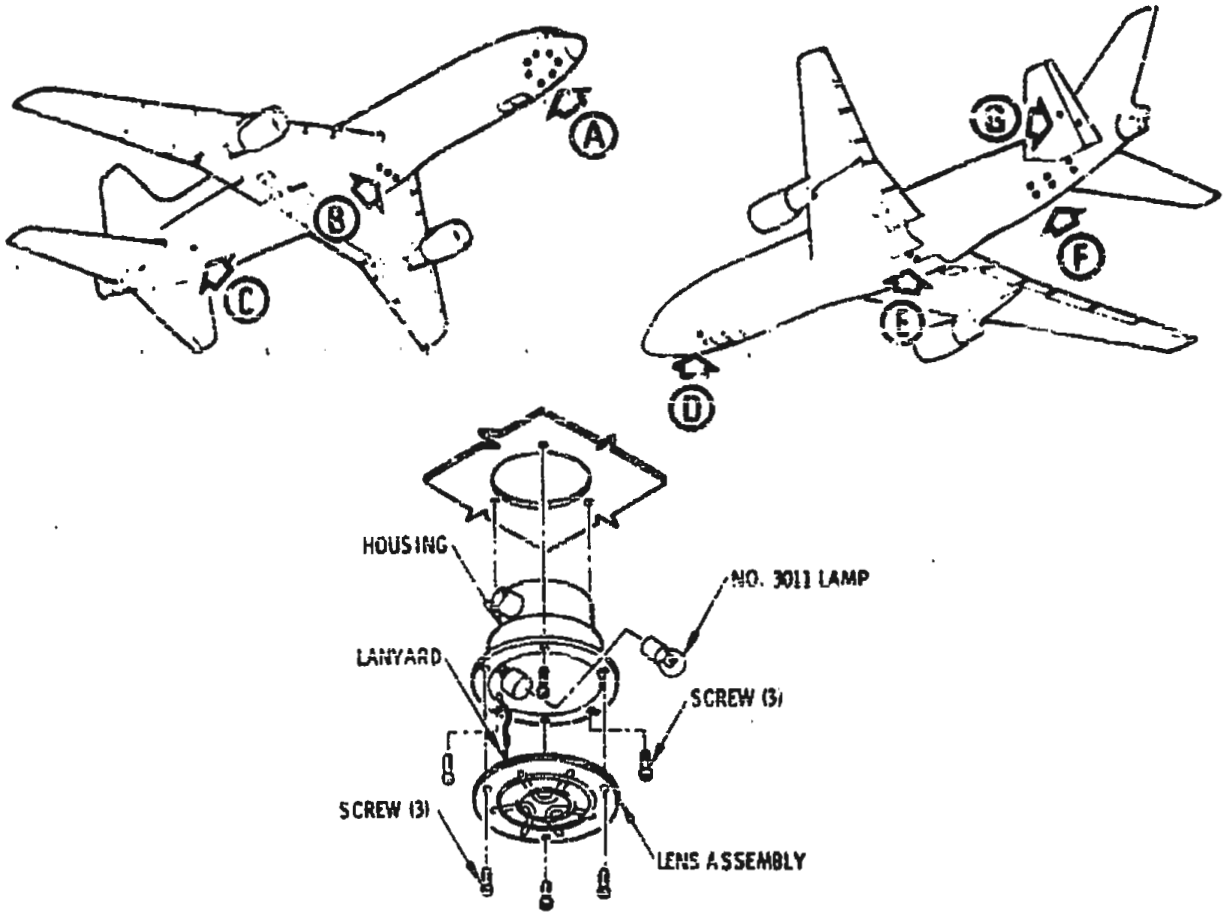
2. Service Compartment Lights

A. Description

The low-intensity service compartment lights are used for general illumination of the equipment during maintenance and servicing (Ref. Fig. 1).

Each light incorporates an integral 115/26.5V ac stepdown transformer. The lights in each compartment are controlled as follows (Ref. Fig. 2):

(1) Forward electronic service center - seven lights controlled by two toggle switches connected in



INDEX	AREA	ZONE	NO. OF LIGHTS	CIRCUIT BREAKER	CIRCUIT BREAKER LOCATION
A	FORWARD ELECTRONICS SERVICE CENTER	112 113	7	FLIGHT STA LT FWD SERVICE CTR LT	CB2-K, 9
B	MID ELECTRICAL SERVICE CENTER	137	3	SVCE COMPT LIGHTS	GALLEY RIGHT -H,20
C	AFT ELECTRONICS EQUIPMENT AREA	164	1	LIGHTING CARGO AFT	GALLEY LEFT -E,15
D	ECS COMPARTMENT	117 118	2	FLIGHT STA LT FWD SERVICE CTR LT	CB2-K, 9
E	HYDRAULIC SERVICE CENTER	147	2	SVCE COMPT LIGHTS	GALLEY RIGHT -H,20
F	AFT FUSELAGE AREA	316 317	6		
G	S - DUCT AREA	313 314	2		

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R
R

Service Compartment Lights
Figure 1

R R parallel. One switch is located next to each FESC access door.

(2) ECS compartment - one light in each compartment R R controlled by a toggle switch located next to each access door.

(3) Mid electrical service center - three lights controlled by two toggle switches connected in parallel. One switch is accessible from the outside access door. The other switch is on the galley right circuit breaker panel(H-20).

(4) Hydraulic service center - two lights controlled by a R R toggle switch on the hydraulic service panel adjacent to the forward access door.

(5) Aft electronic equipment area - one light connected to the aft cargo compartment lighting circuit (Ref. 33-31-00).

(6) Aft fuselage and S-duct area - eight lights controlled by a toggle switch at the left side of the access door.

3. APU and No. 2 Eng Compt Lights

A. Description

The APU and No. 2 engine compartment lights (Ref. Fig. 3 and 4) are similar to service compartment lights except for a lower voltage lamp. Each light incorporates an integral 115/6V ac stepdown transformer. The lights in each compartment are controlled as follows (Ref. Fig. 2):

(1) No. 2 engine compartment - one light controlled by a toggle switch next to the light or by a door-actuated Micro switch at the interphone jack.

(2) APU compartment - two lights, one in the forward right corner and the other in the aft left corner, controlled by a switch next to each light. The switches are connected in parallel.

4. Service Panel Lights

A. Description

The Refueling and Defueling, potable water service, waste service, and APU ground control panels each use 28V dc

lights. The lights incorporate a heavy glass lens protected by a cadmium-plated grill (Ref. Fig. 5, 6, 7, and 8).

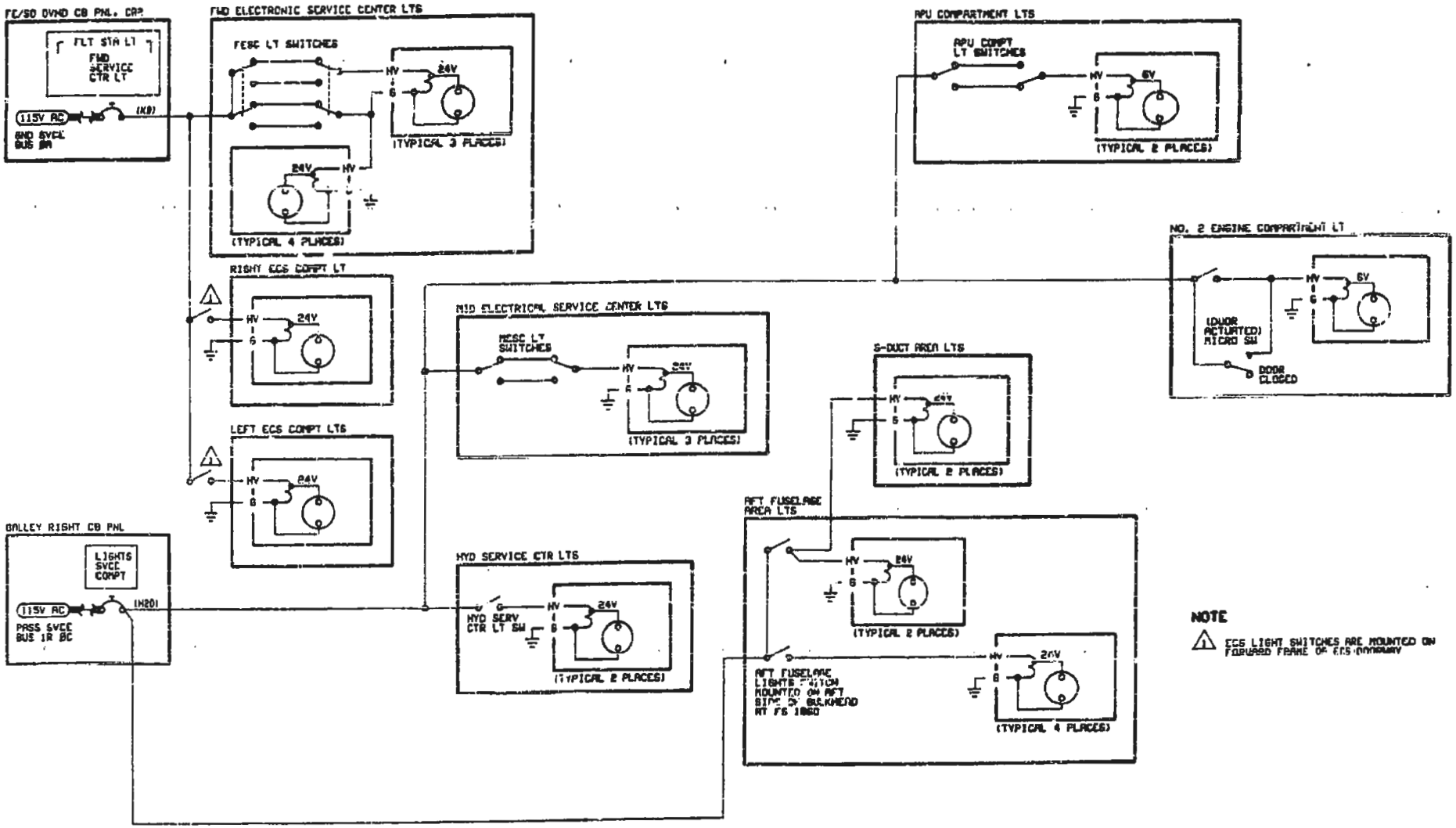
The lights are controlled as follows:

(1) Refueling and Defueling panels - one light for each panel controlled by the refueling bus transfer relay (Ref. Fig. 5 and 9).

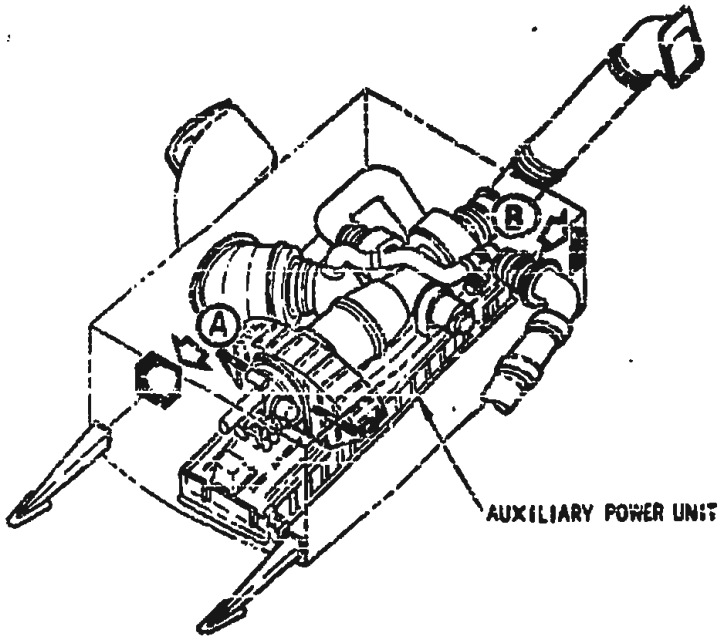
(2) Potable Water service panel - one light on the panel controlled by a toggle switch next to the light(Ref. Fig. 6 and 10).

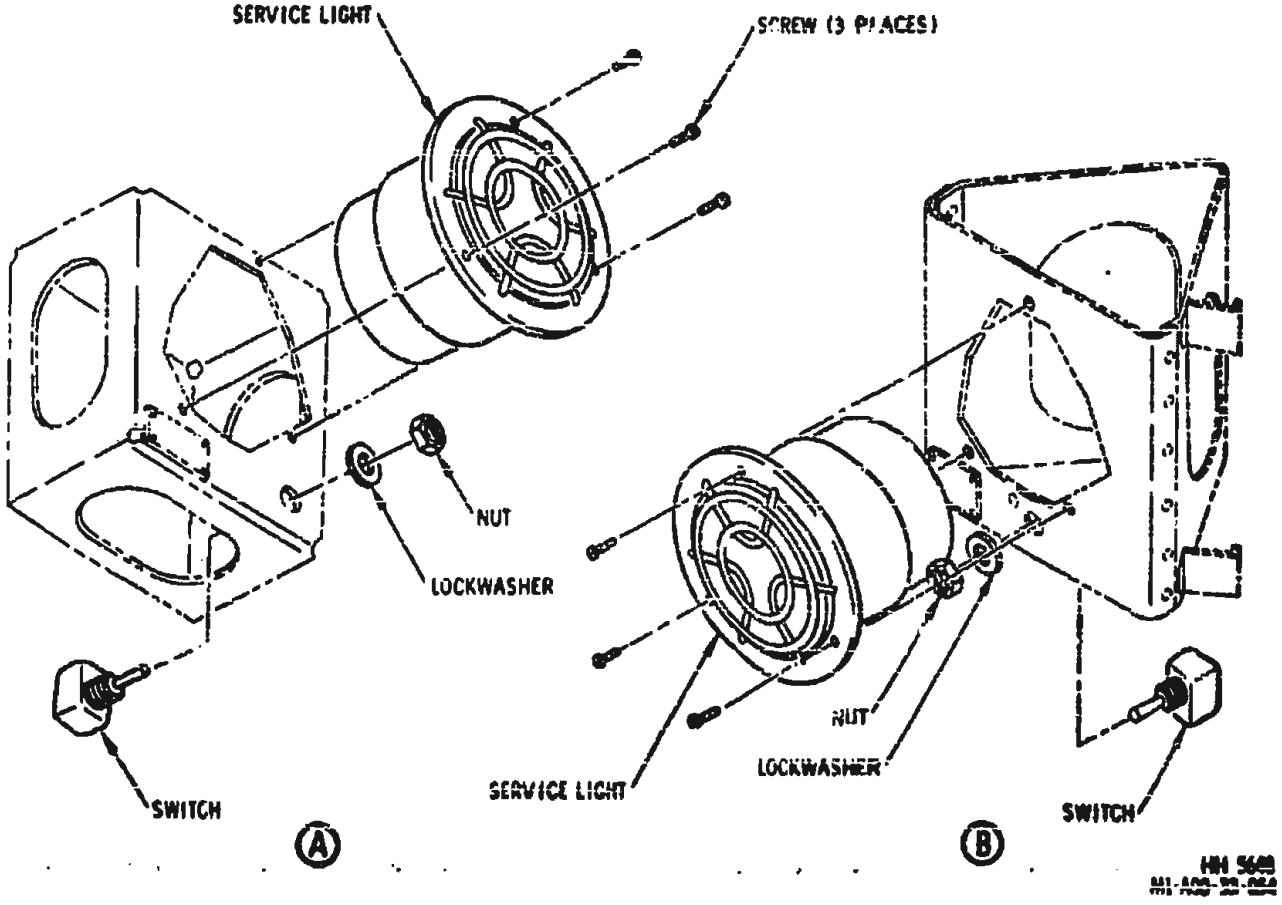
(3) Waste service panels - one light on each panel controlled by a toggle switch on the respective panel (Ref. Fig. 7 and 10).

(4) APU ground control panel - one light controlled by a door actuated Micro switch (Ref. Fig. 8 and 11).

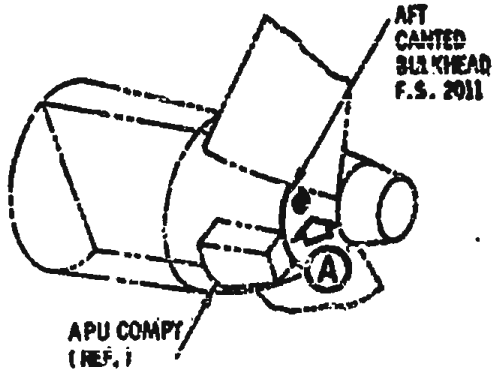


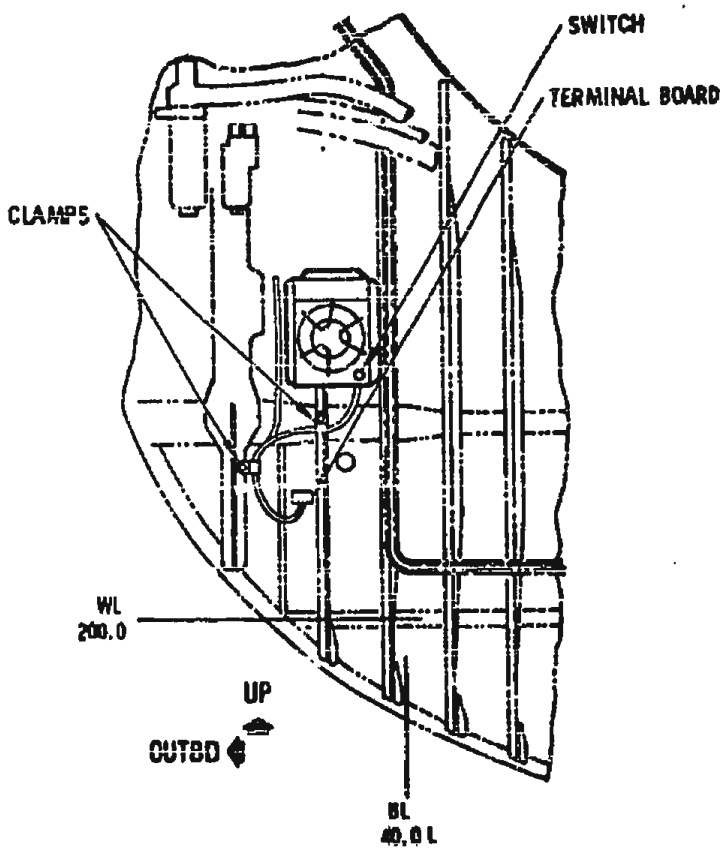
Service Compartment Lighting Schematic
Figure 2





APU Compartment Light
Figure 3





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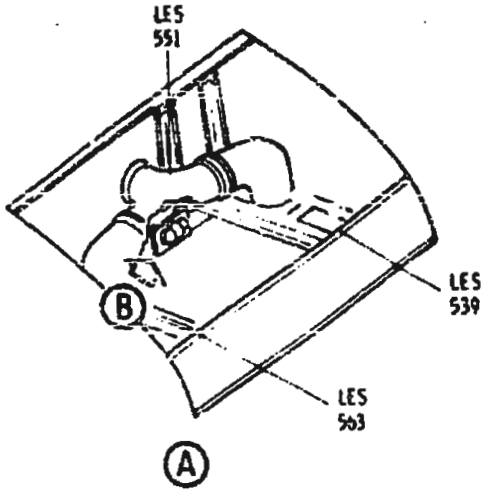
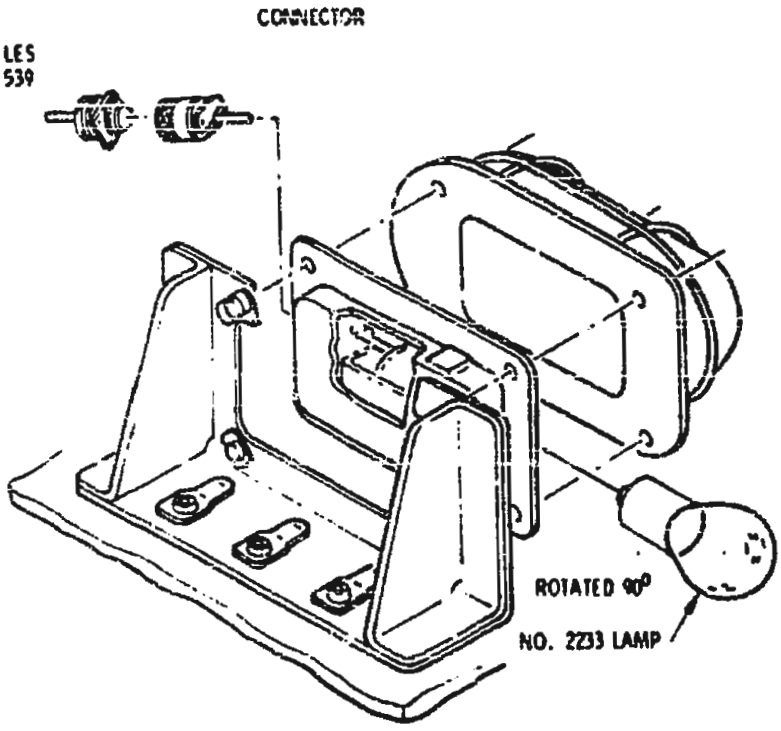
R
R

No. 2 Engine Compartment Light
Figure 4

ZONE 521 AND 621

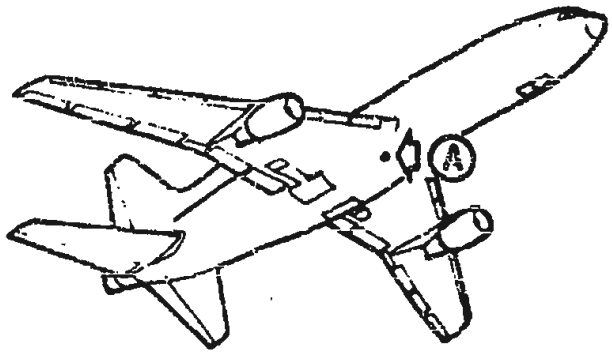


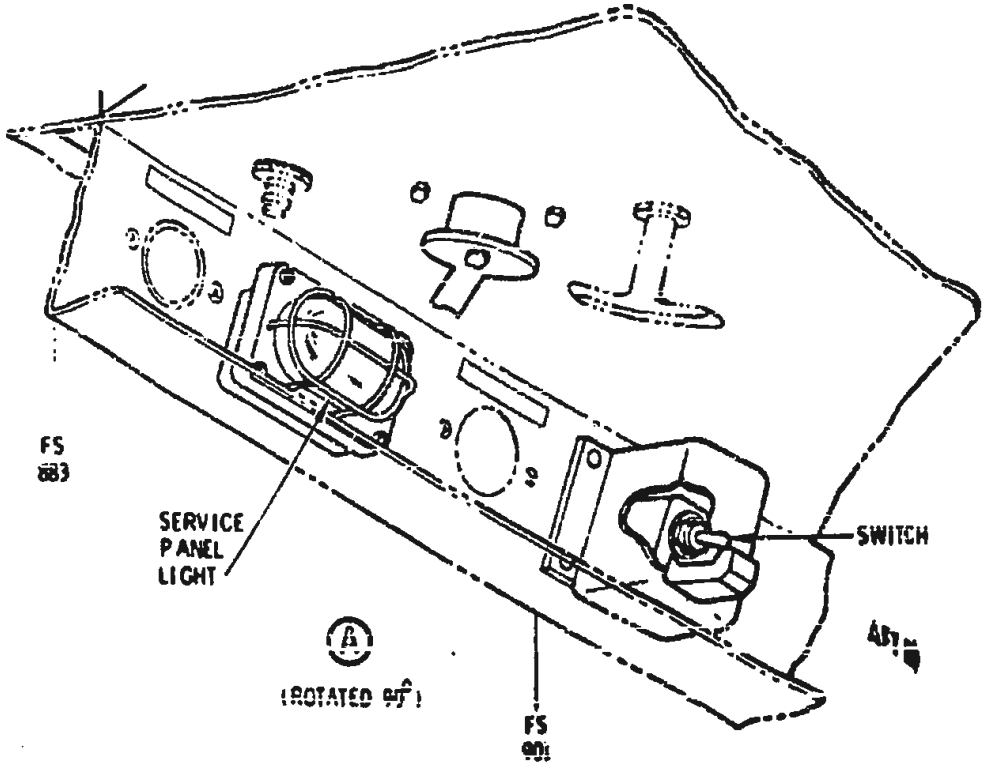


REFUELING AND DEFUELING
LIGHT ASSEMBLY

MI-0000-33-1490

R Refueling and Defueling Light
R Figure 5





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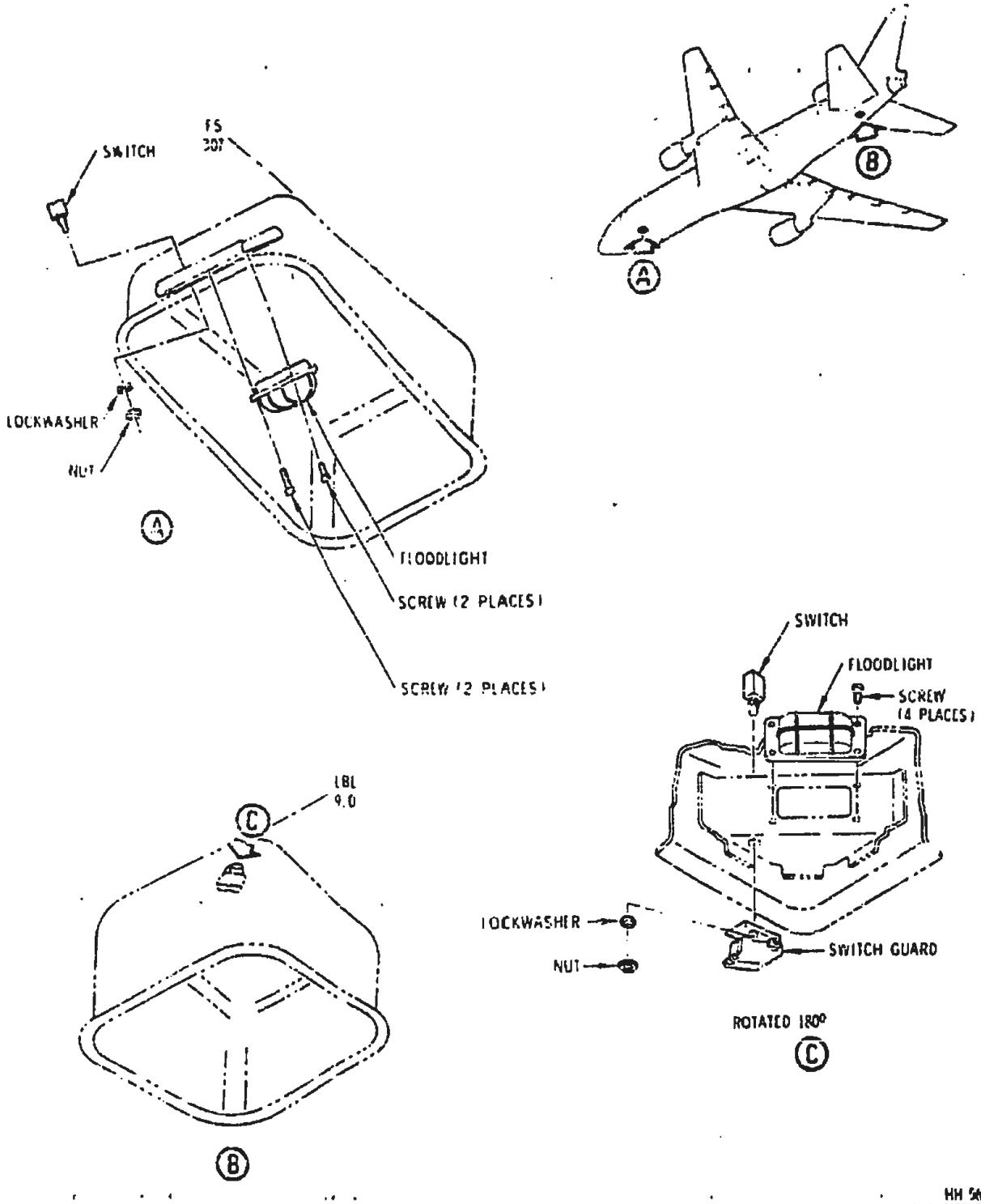
Potable Water Service Panel Light
Figure 6



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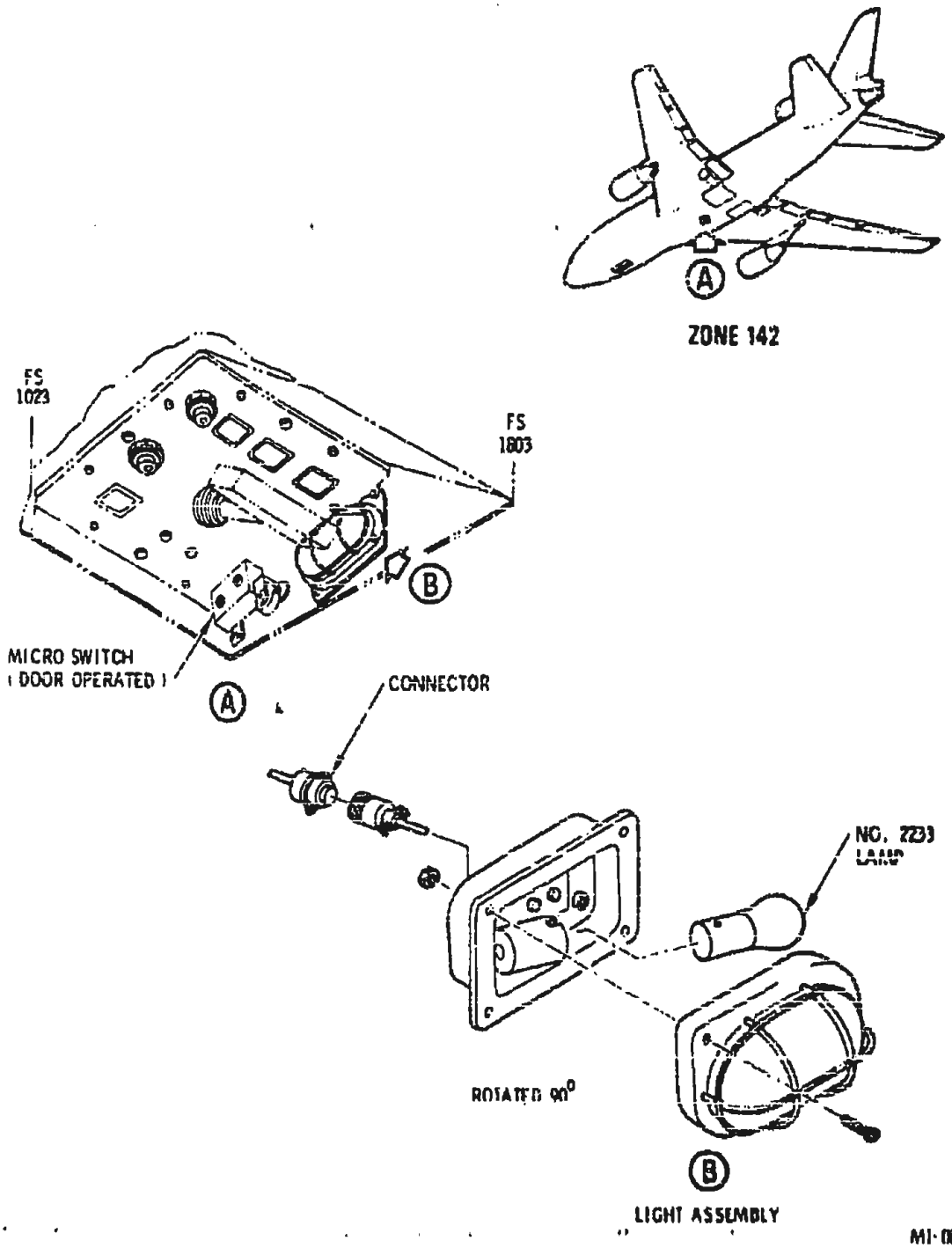
R
R

Waste Service Panel Light
Figure 7

EFFECTIVITY: ALL

001B



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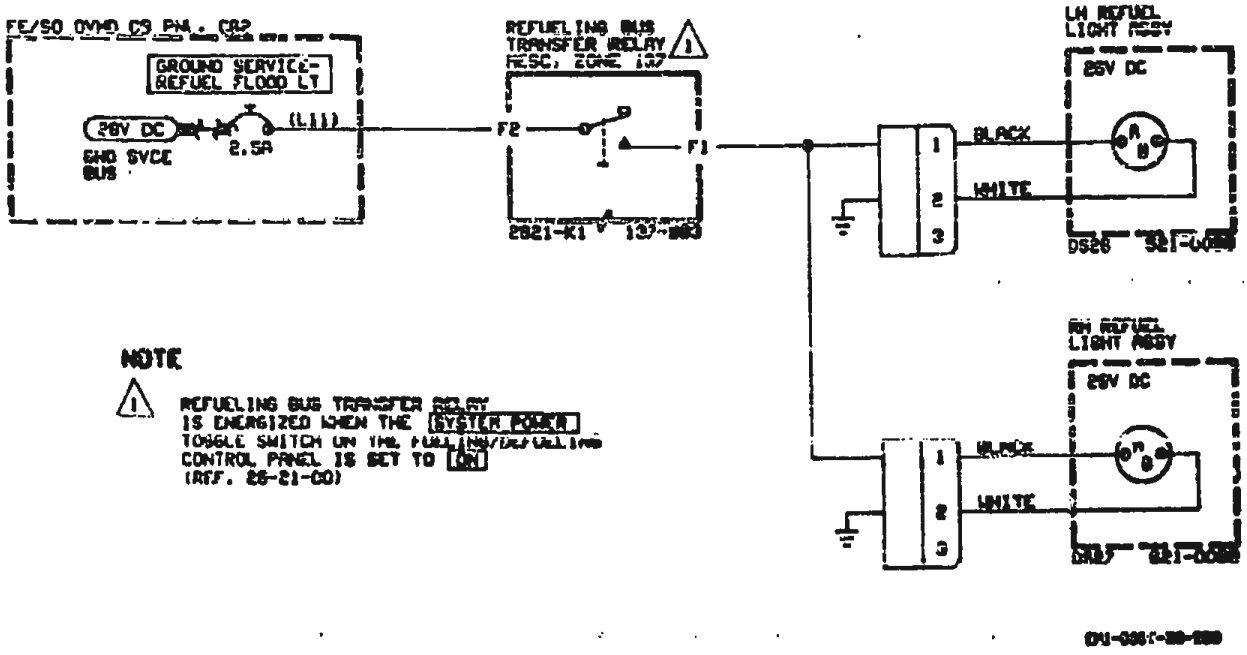
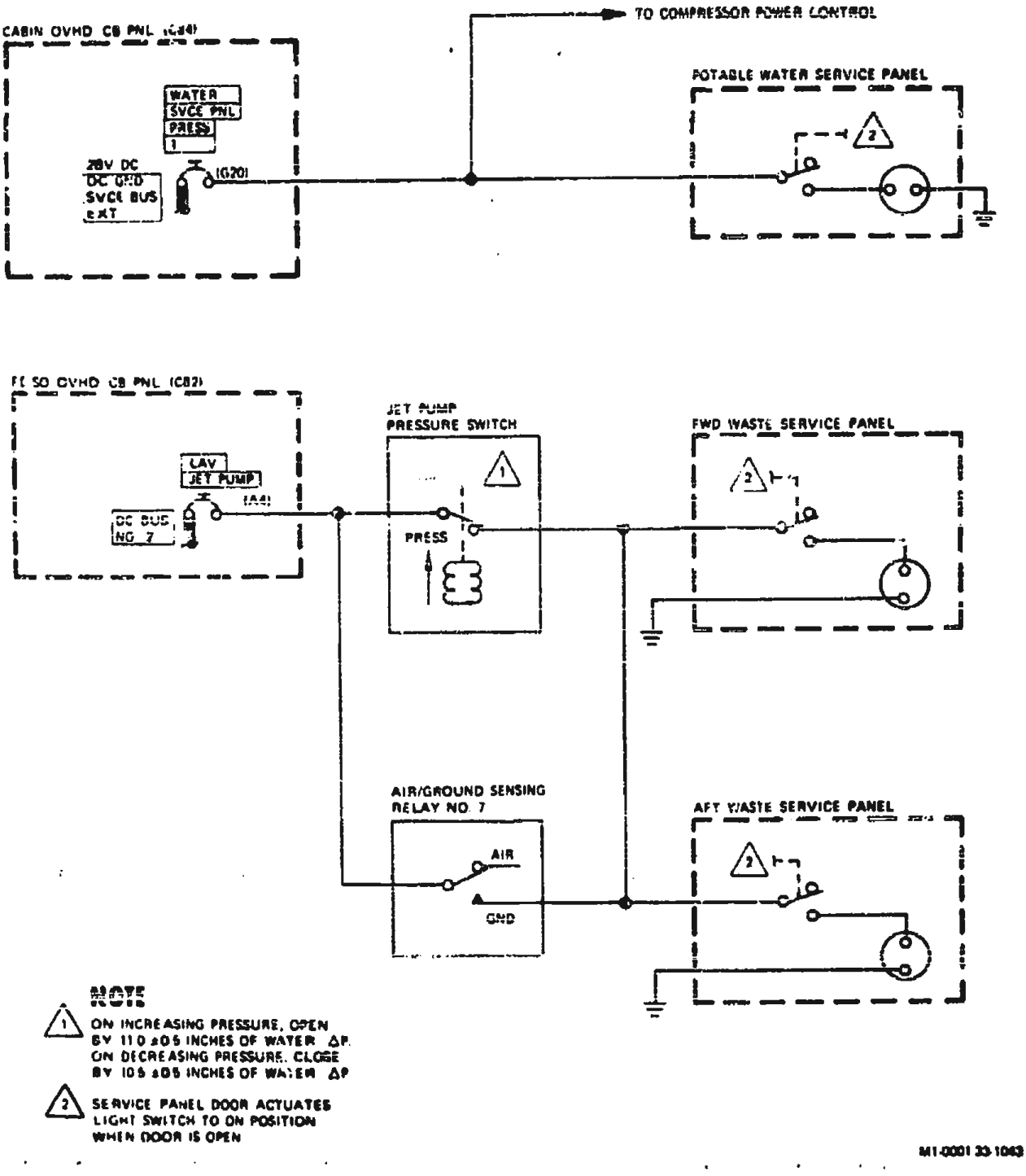
R
R

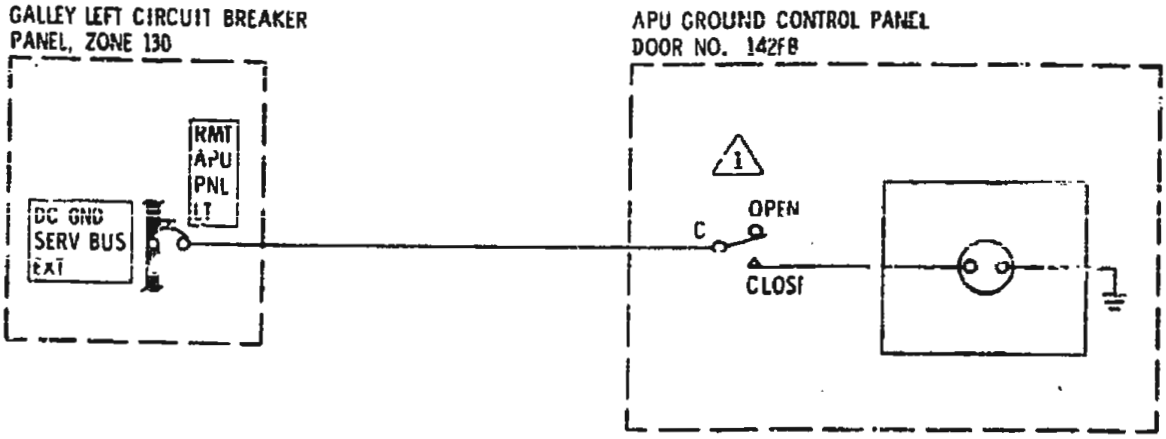
APU Ground Control Panel Light
Figure 8



R
R Refueling and Defueling Panel Lighting Schematic
Figure 9


TO COMPRESSOR POWER CONTROL
CABIN OVHD CB PNL (C84)
WATER SVCE PNL PRESS
1
28V DC DC GRD SVCE BUS EXT
(G20)
POTABLE WATER SERVICE PANEL
2
FE SO OVHD CB PNL (C82)
LAV JET PUMP
(A4)
DC BUS NO. 7
JET PUMP PRESSURE SWITCH
1
PRESS
FWD WASTE SERVICE PANEL
2
AIR/GROUND SENSING RELAY NO. 7
AIR
GND
AFT WASTE SERVICE PANEL
2
NOTE
1 ON INCREASING PRESSURE, OPEN BY 11.0 ±0.5 INCHES OF WATER ΔP. ON DECREASING PRESSURE, CLOSE BY 10.5 ±0.5 INCHES OF WATER ΔP
2 SERVICE PANEL DOOR ACTUATES LIGHT SWITCH TO ON POSITION WHEN DOOR IS OPEN
M1-0001 33-1043

R R Water and Waste Service Panels Lighting Schematic
Figure 10



1 THE SWITCH IS ACTUATED TO THE CLOSED POSITION WHEN THE DOOR IS OPENED

EM1-0100-33-564

R APU Ground Control Panel Lighting Schematic
R Figure 11

SERVICE COMPARTMENT LIGHTING - ADJUSTMENT AND TEST

1. Referenced Procedure

6-40-00	Exterior Access Doors and Removable Panels - Description and Operation
6-50-00	Interior Access Doors and Removable Panels - Description and Operation
24-00-00	Electrical Power - Maintenance Practices

2. Adjustment/Test

A. Operational Test

(1) Turn on electrical power (Ref. 24-00-00).

(2) On Flight Engineer/Second Officers overhead circuit breaker panel CB2, zone 215, verify that circuit breaker GROUND SERVICE - FLT STA LT - FWD SERVICE CTR LT(K9) is closed.

On the galley left circuit breaker panel, zone 130, verify that circuit breaker DK GRD SERV BUS EXT - DC BUS PWR REFUELING (B21) is closed.

R On the galley right circuit breaker panel, zone 130, verify that circuit breaker PASS SERV BUS 1R - LIGHTS - SVCE COMPT (H15) is closed.

(3) Open door 211CB (Ref. 6-50-00) in the floor of the flight station to gain access to the forward electronic service center (FESC) lights switch. Place the switch in the on position and verify that all seven service lights come on.

(4) Actuate the switch next to the FESC exterior door 112AB (Ref. 6-40-00) and verify that all FESC lights go out.

(5) Open door 113AB (Ref. 6-40-00) to the forward waste system service panel, and verify that the panel light comes on.

(6) Close door 113AB (Ref. 6-40-00) and verify that the panel light goes out as the door closes.

(7) Open the right environmental control system (ECS) compartment door 118CR (Ref. 6-40-00) and place the

light switch in the on position. Verify that the ECS compartment light comes on.

(8) Place the ECS compartment light switch in the off position and verify that the light goes out.

(9) Open the left ECS compartment door 117AL (Ref. 6-40-00) and place the light switch in the on position. Verify that the ECS compartment light comes on.

(10) Place the ECS compartment light switch in the off position and verify that the light goes out.

(11) Open door 192F (Ref. 6-40-00) to the potable water service panel and verify that the panel light comes on.

(12) Close the door and verify that the panel light goes out as the door closes.

(13) Open door 147AB (Ref. 6-40-00) to the hydraulic service center and place the lights switch in the on position. Verify that both lights come on.

(14) Place the switch in the off position and verify that the hydraulic service center lights go out. Close door 147AB (Ref. 6-40-00).

(15) Gain access to the mid electrical service center (MESC) (Ref. 6-40-00) lights switch located on the galley wall next to the MESC door. Place the switch in the on position and verify that the three MESC service lights come on.

(16) Enter the MESC to gain access to the switch next to the MESC external door 137AZ (Ref. 6-40-00). Actuate the switch and verify that the MESC service lights go out.

(17) Gain access to the APU compartment. Actuate the switch next to door 319CL (Ref. 6-40-00) and verify that both APU service lights come on.

(18) Actuate the APU compartment lights switch next to door 319BR (Ref. 6-40-00) and verify that the APU lights go out.

R (19) Open door 317BB (Ref. 6-40-00) and place the aft fuselage service lights switch in the on position. Verify that the six lights in the aft fuselage area come on and that the two lights in the S-duct area come on.

(20) Place the switch in the off position and verify that
R all eight service lights go out. Close door 317BB (Ref. 6-40-00).

(21) Open door 167AB (Ref. 6-40-00) to the aft waste system service panel and verify that the panel light comes on.

(22) Close door 167AB (Ref. 6-40-00) and verify that the panel light goes out as the door closes.

(23) Open No. 2 engine compartment door 433BL (Ref. 6-40-00) and place the service light switch in the on position. Verify that the service light comes on.

(24) Place the switch in the off position and verify that the light goes out. Close door 433BL (Ref. 6-40-00).

(25) Open the service interphone system door 318BB (Ref. 6-40-00) and verify that No. 2 engine service light comes on.

(26) Close the service interphone system door and verify that the light goes out as the door closes.

(27) Open fueling panel door 621FB (Ref. 6-40-00) on the forward lower surface of the right wing and place the SYSTEM POWER toggle switch in the ON position. Verify that the fueling panel service light comes on.

(28) Open fueling panel door 521FB (Ref. 6-40-00) on the forward lower surface of the left wing and verify that the fueling panel service light is on. Close fueling panel door 521FB.

(29) At the right wing fueling panel 621FB (Ref. 6-40-00), place the SYSTEM POWER toggle switch in the OFF position and verify that the service light goes out. Close fueling panel door 621FB.

(30) Turn off electrical power (Ref. 24-00-00).

SERVICE COMPARTMENT LIGHTS - REMOVAL AND INSTALLATION

1. Referenced Procedure

   24-41-00 External Power/Ground Service System - Maintenance Practices

2. Removal/Installation

   A. Removal

      (1) Open and tag applicable circuit breaker for light to be removed (Ref Fig. 401).

      (2) Remove screws securing lens to housing and allow lens to hang by lanyard.

      (3) Remove lamp.

      (4) Remove terminal block cover. Disconnect and tag wires on light terminals.

      (5) Remove nut and seal from electrical connector, and withdraw wires.

      (6) Remove screws securing housing to bracket and remove housing.

   B. Installation

      (1) Verify that circuit breaker opened in Step 2A(1) is open and tagged.

      (2) Position housing on bracket and secure with screws.

      (3) Insert wires through connector and install seal and nut.

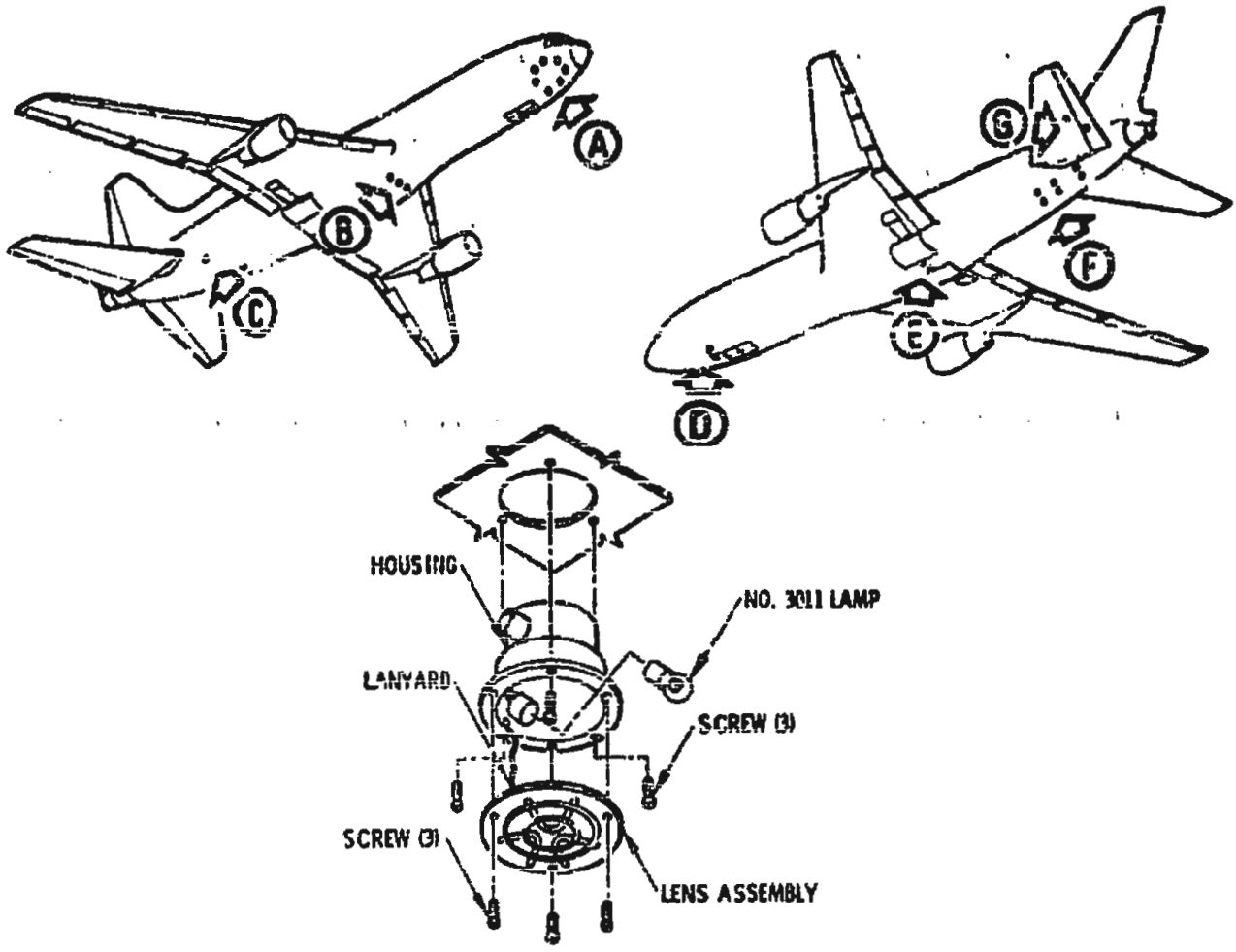
R R (4) Connect wires to terminals, and verify wires are routed as shown in Figure 402.

      (5) Install terminal block cover.

      (6) Install lamp.

      (7) Position lens and secure with screws.

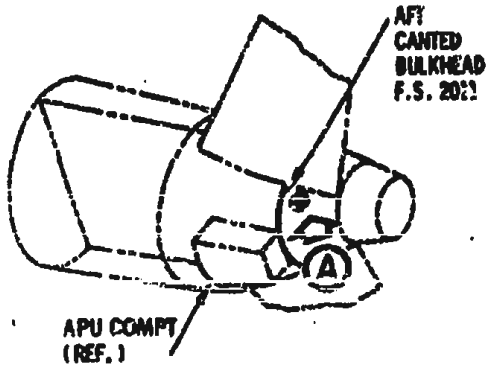
      (8) Remove tag and close circuit breaker opened in Step 2A(1).

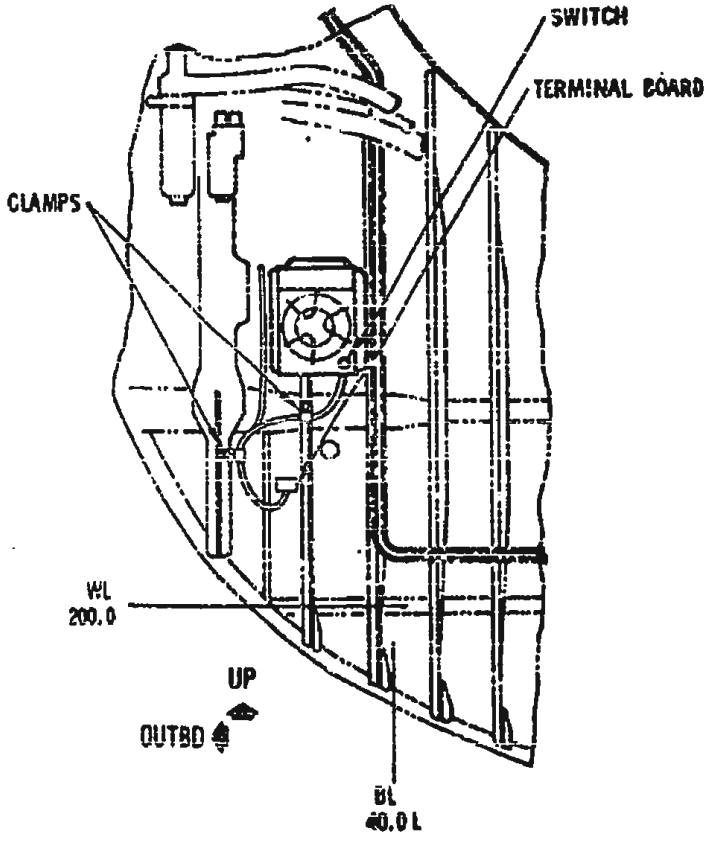


INDEX	AREA	ZONE	NO. OF LIGHTS	CIRCUIT BREAKER	CIRCUIT BREAKER LOCATION
A	FORWARD ELECTRONICS SERVICE CENTER	112 113	7	FLIGHT STA LT FWD SERVICE CTR LT	CB2-K, 9
B	MID ELECTRICAL SERVICE CENTER	137	3	SVCE COMPT LIGHTS	GALLEY RIGHT -H,20
C	AFT ELECTRONICS EQUIPMENT AREA	164	1	LIGHTING CARGO AFT	GALLEY LEFT -E,15
D	ECS COMPARTMENT	117 118	2	FLIGHT STA LT FWD SERVICE CTR LT	CB2-K, 9
E	HYDRAULIC SERVICE CENTER	147	2	SVCE COMPT LIGHTS	GALLEY RIGHT -H,20
F	AFT FUSELAGE AREA	316 317	6		
G	S - DUCT AREA	313 314	2		

M1-0002-33-052

R Service Compartment Lights - Removal and Installation
R Figure 401





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R R No. 2 Engine Compartment Light
Figure 402

R R EFFECTIVITY: ALL

001B

(9) Turn on electrical power (Ref. 24-41-00).

(10) Turn on light to test operation. Turn off after test.

(11) Turn off electrical power (Ref. 24-41-00).

3. Relamping

A. Service compartment Light

(1) Verify that light is turned off.

(2) Remove lens and allow to hang by lanyard.

(3) Remove faulty lamp.

(4) Install replacement lamp.

(5) Turn on electrical power (Ref. 24-41-00).

(6) Turn on light to test lamp. Turn light off after test.

(7) Turn off electrical power (Ref. 24-41-00).

(8) Install lens.

REFUELING AND DEFUELING LIGHTS - REMOVAL AND INSTALLATION

1. Equipment and Materials

Sealant, Dow Corning Corp. 20-078, or equivalent

2. Referenced Procedure

R R	6-40-00	Exterior Access Doors and Removable Panels - Description and Operation
R	24-00-00	Electrical Power - Maintenance Practices

3. Removal/Installation

A. Removal

(1) On Flight Engineer/Second Officers overhead circuit breaker panel CB2, zone 215, open and tag circuit breaker (L11) GROUND SERVICE - REFUEL FLOOD LT.

(2) Open refueling and defueling access door 521FB (left side) or 621FB (right side) as applicable. (Ref. 6-40-00).

(3) Disconnect electrical connector.

(4) Remove screws securing refueling and defueling light to the light bracket. Remove light.

B. Installation

(1) Verify that circuit breaker opened in Step 3A(1) is open and tagged.

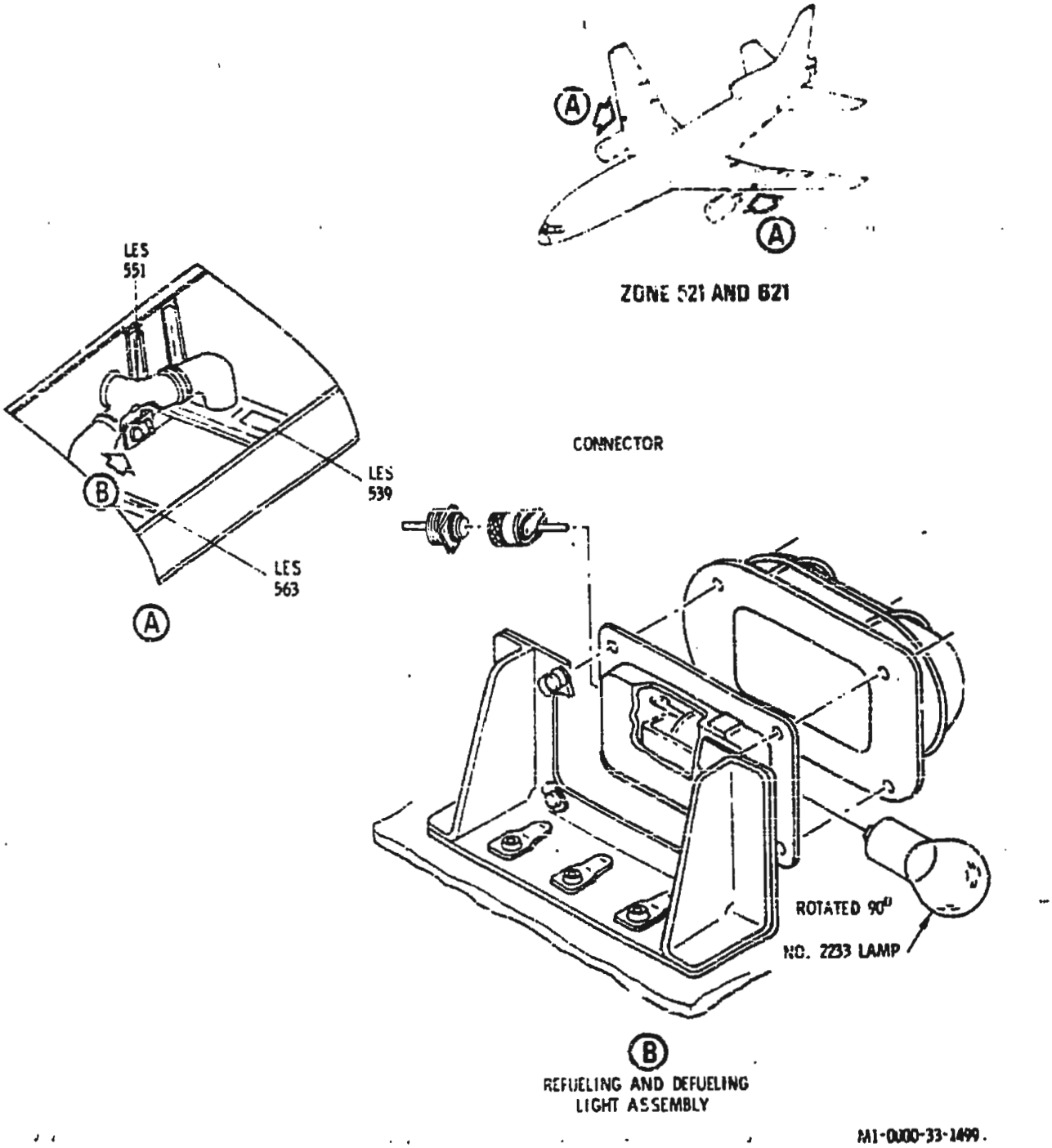
(2) Install refueling and defueling light on light bracket and secure with screws.

(3) Connect electrical connector.

(4) Close circuit breaker opened in Step 3A(1).

(5) Turn on electrical power (Ref. 24-41-00).

(6) On refueling and defueling panel (right side), place SYSTEM POWER switch in the ON position and verify that fueling and defueling panel light comes on.



MI-0000-33-1499.

R Refueling and defueling light
R Figure 401

(7) On Refueling and defueling panel, place SYSTEM POWER switch in the OFF position and verify that light goes out.

R (8) Close refueling and defueling access doors (Ref.
R 6-40-00).

4. Relamping

A. Refueling and defueling light

R (1) Open refueling and defueling access door 521FB (left
R side) or 621FB (right side), as applicable (Ref.
R 6-40-00).

(2) On refueling and defueling panel (right side), verify that SYSTEM POWER switch is placed in the OFF position.

(3) Remove screws and nuts securing lens guard and glass lens to fueling and defueling light housing. Remove lens guard and glass lens.

(4) Press lamp in and turn CCW to remove.

(5) Install replacement lamp. Press in and turn CW to secure.

(6) Apply sealant between glass lens and refueling and defueling light housing.

(7) Install glass lens and lens guard and secure with screws and nuts.

(8) Turn on electrical power (Ref. 24-41-00).

(9) On refueling and defueling panel (right side), place SYSTEM POWER switch in the ON position and verify that refueling and defueling light comes on.

(10) On refueling and defueling panel, place SYSTEM POWER switch in the OFF position and verify that light goes out.

R (11) Close refueling and defueling (Ref. 6-40-00) access
R doors.

APU COMPARTMENT LIGHTS - REMOVAL AND INSTALLATION

1. Referenced Procedure

R R	6-40-00	Exterior Access Doors and Removable Panels - Description and Operation
R	24-00-00	Electrical Power - Maintenance Practices

2. Removal/Installation

A. Removal

(1) On galley right circuit breaker panel, zone 130, open and tag circuit breaker LIGHTS - SVCE COMPT (H20).

R R (2) Open access door 319BR right forward APU light or 319CL left aft APU light (Ref. 6-40-00).

(3) Remove screws securing cover assembly to light (Ref. Fig. 401). Allow light cover assembly to hang by lanyard.

(4) Remove lamp.

(5) Remove terminal block cover. Disconnect and tag wires from light terminals.

(6) Remove nut and seal from electrical connector and withdraw wires.

(7) Remove screws securing light to bracket and remove APU light.

B. Installation

(1) Verify that circuit breaker opened in Step 2A(1) is open and tagged.

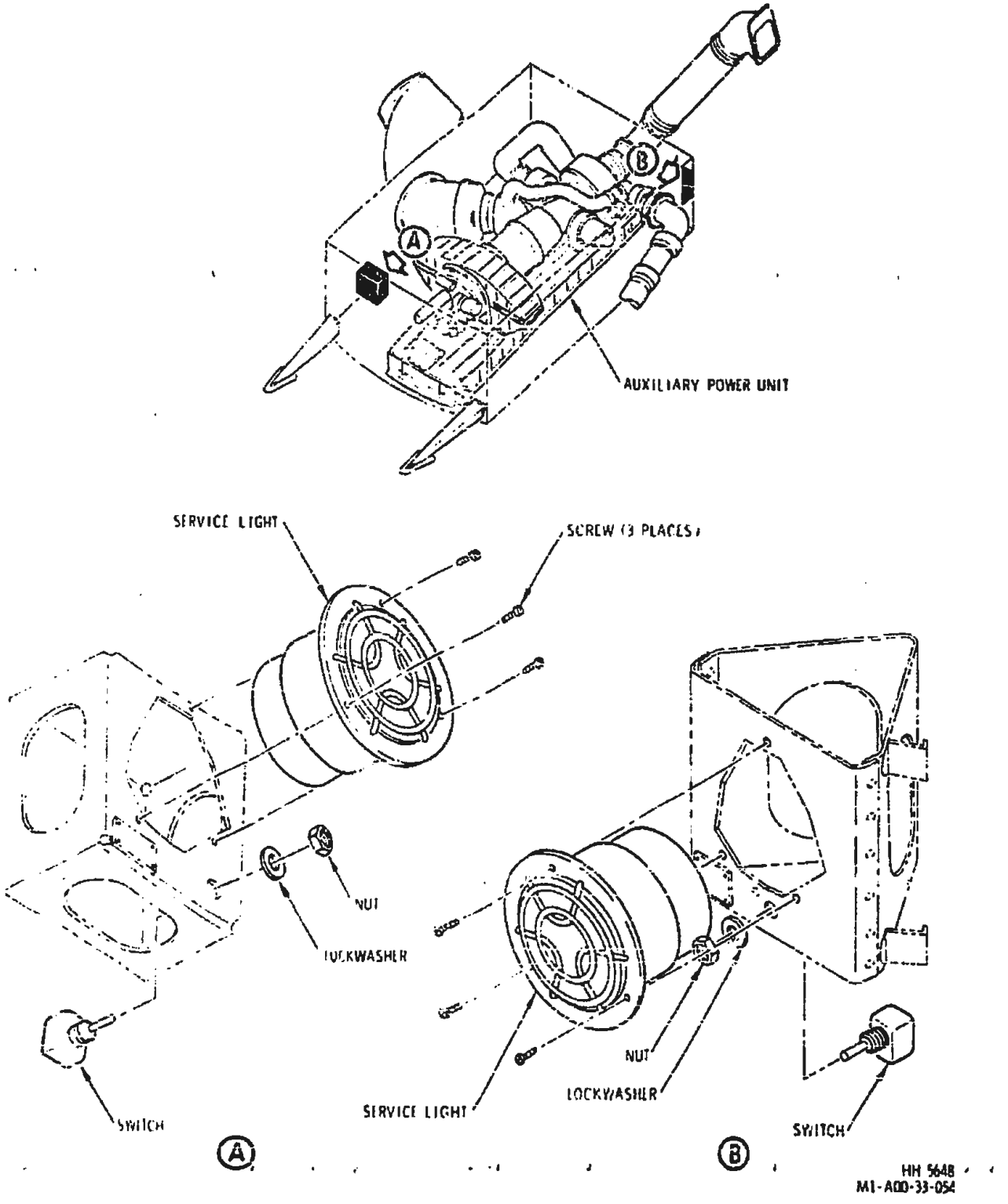
(2) Position light on bracket and secure with screws.

(3) Insert wires through connector and install seal and nut.

(4) Connect wires to light terminals.

(5) Install terminal block cover.

(6) Install lamp.



APU Compartment Light - Removal and Installation
Figure 401

(7) Position light cover assembly on light and secure with screws.

(8) Remove tag and close circuit breaker opened in Step 2A(1).

(9) Turn on electrical power (Ref. 24-41-00).

(10) Turn on light to test operation. Turn light off after test.

R

R (11) Turn off electrical power (Ref. 24-41-00).

(12) Close access door.

3. Relamping

A. APU Compartment Light

(1) Verify that APU compartment lights are off.

(2) Remove light cover assembly and allow to hang by lanyard.

(3) Remove faulty lamp.

(4) Install replacement lamp.

(5) Turn on electrical power (Ref. 24-41-00).

(6) Turn on APU compartment lights to test lamp. Turn lights off after test.

(7) Turn off electrical power (Ref. 24-41-00).

(8) Install light cover assembly.

POTABLE WATER SERVICE PANEL LIGHT - REMOVAL AND INSTALLATION

1. Referenced Procedure

   24-41-00 External Power/Ground Service System - Maintenance Practices

2. Removal/Installation

   A. Removal

R (1) On galley left circuit breaker panel, zone 130, open and tag circuit breaker LIGHTING - WATER SVCE PNL (G20).

R (2) Open access panel marked POTABLE WATER GROUND SERVICE PANEL in zone 136 (Ref. Fig. 401).

R (3) Remove attaching hardware and lens assembly.

R (4) Disconnect and tag wires on light terminals.

R (5) Remove light housing assembly.

   B. Installation

(1) Verify that circuit breaker opened in Step 2A(1) is open and tagged.

R (2) Position light housing assembly.

R (3) Connect wiring.

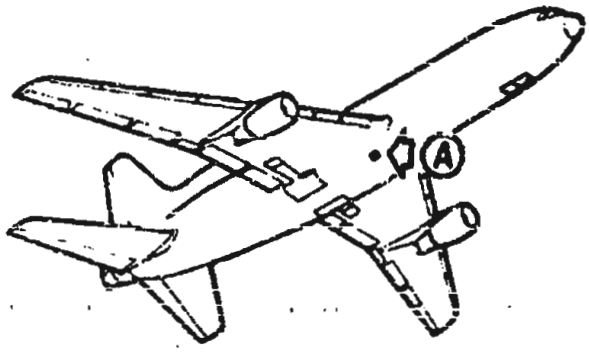
R R (4) Position lens assembly on light housing and secure with attaching hardware.

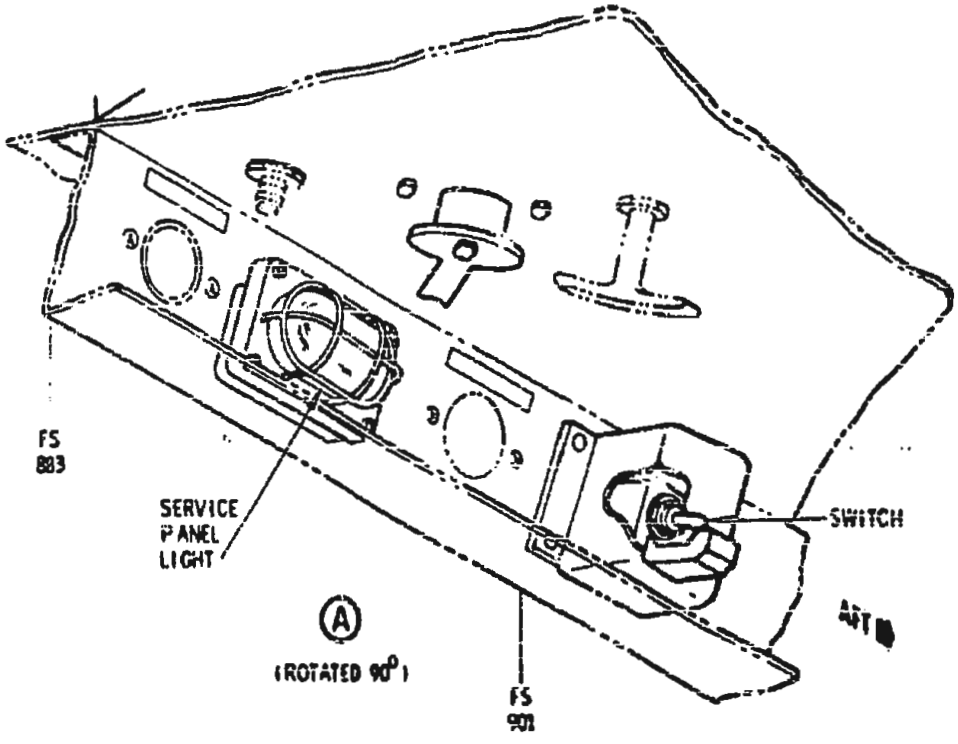
R R (5) Remove tag and close circuit breaker opened in Step 2A(1).

R (6) Turn on electrical power (Ref. 24-41-00).

R R (7) Turn on light to test operation. Turn light off after test.

R (8) Turn off electrical power (Ref. 24-41-00).





HH 5237
M1-0008-33-056

R Potable Water Service Panel Light - Removal and Installation
R Figure 401

EFFECTIVITY: ALL

001B

3. Relamping

A. Potable Water Service Panel Light

(1) Verify that light is off.

R (2) Remove lens assembly (Ref. Fig. 401).

(3) Remove faulty lamp.

(4) Install replacement lamp.

(5) Turn on electrical power (Ref. 24-41-00).

(6) Turn on light to test lamp. Turn light off after test.

(7) Turn off electrical power (Ref. 24-41-00).

(8) Install lens assembly.

WASTE SERVICE PANEL LIGHT - REMOVAL AND INSTALLATION

1. Referenced Procedure

R	6-40-00	Exterior Access Doors and Removable Panels -
R		Description and Operation
R	24-00-00	Electrical Power - Maintenance Practices

2. Removal/Installation

A. Removal

R (1) On Flight engineers second officers (FE/SO) overhead
R circuit breaker panel CB2, zone 216, open and tag
R circuit breaker LAV-JET PUMP (A4).

R (2) Open waste system access panel (Ref. 6-40-00):

R zone 113 for forward lavatories

R zone 167 for aft lavatories

R (3) Remove attaching hardware and remove service light
R assembly.

R (4) Disconnect and tag wires on terminals at rear of light
R assembly.

B. Installation

(1) Verify that circuit breaker opened in Step 2A(1) is open and tagged.

R (2) Connect wiring.

R (3) Secure light assembly with attaching hardware.

(4) Remove tag and close circuit breaker opened in Step 2A(1).

(5) Turn on electrical power (Ref. 24-41-00).

(6) Turn on light to test operation. Turn light off after test.

(7) Turn off electrical power (Ref. 24-41-00).

(8) Close access panel.

3. Relamping

A. Waste Service Panel Light

(1) Verify that light is turned off.

(2) Remove lens.

(3) Remove faulty lamp.

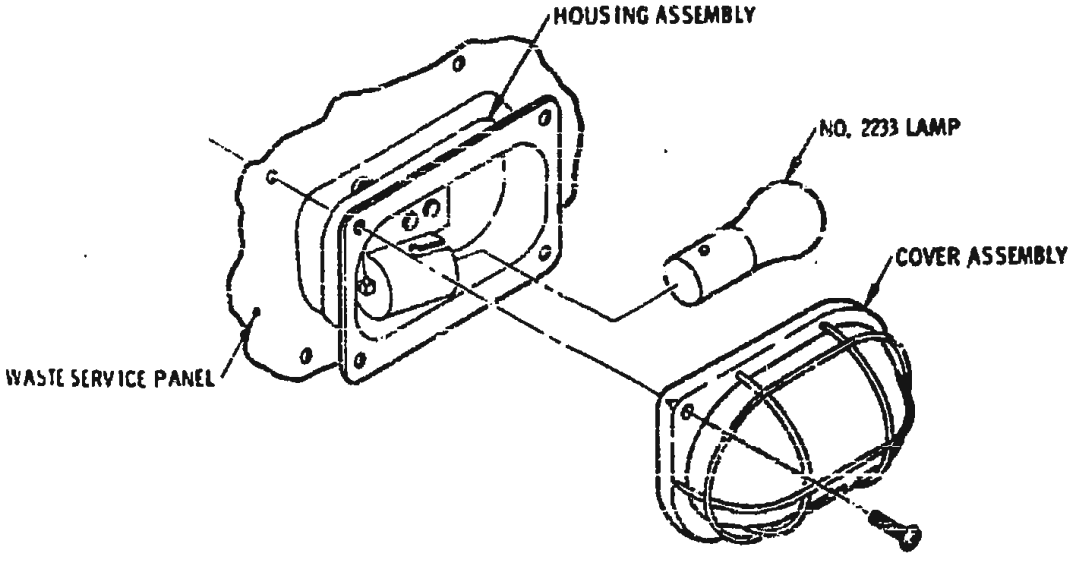
(4) Install replacement lamp.

(5) Turn on electrical power (Ref. 24-41-00).

(6) Turn on light to test lamp. Turn off after test.

(7) Turn off electrical power (Ref. 24-41-00).

(8) Install lens.



M1-0000-33-1573

R Waste Service Panel Light - Removal and Installation
R Figure 401

NO. 2 ENGINE COMPARTMENT LIGHT - REMOVAL AND INSTALLATION

1. Referenced Procedure

R	6-40-00	Exterior Access Doors and Removal Panels -
R		Description and Operation
R	24-00-00	Electrical Power - Maintenance Practices

2. Removal/Installation

A. Removal

(1) On galley right circuit breaker panel, zone 130, open and tag circuit breaker (H20) LIGHTS - SVCE COMPT.

R (2) Open and enter access door 433BL (Ref. 6-40-00); No. 2 engine light is located adjacent to the access door.

(3) Remove screws securing light cover assembly to housing (Ref. Fig. 401). Allow light cover assembly to hang by lanyard.

(4) Remove lamp.

(5) Remove terminal block cover. Disconnect and tag wires on light terminals.

(6) Remove nut and seal from electrical connector and withdraw wires.

(7) Remove screws securing housing to bracket and remove light.

B. Installation

(1) Verify that circuit breaker opened in Step 2A(1) is open and tagged.

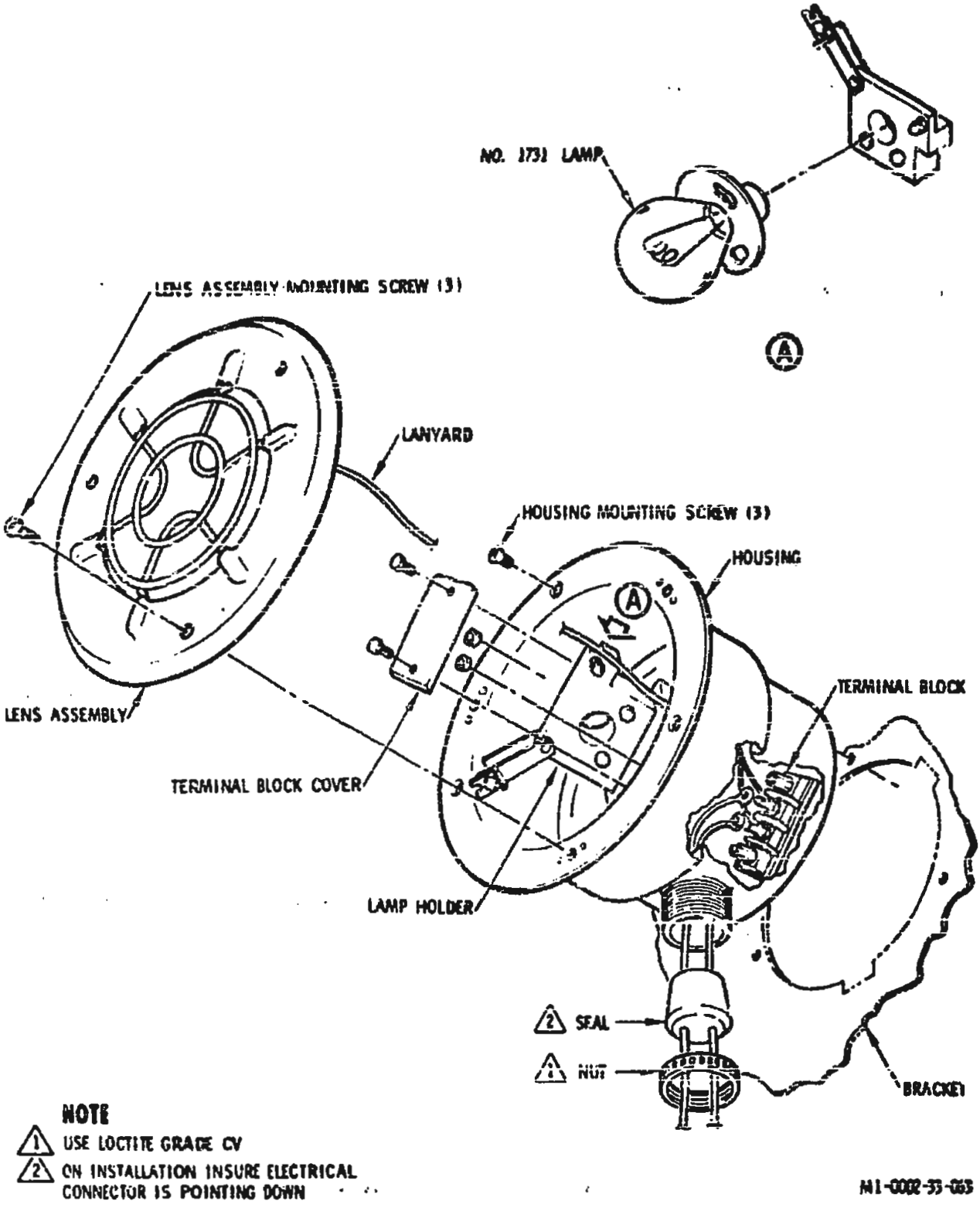
(2) Position housing on bracket and secure with screws.

(3) Insert wires through connector and secure seal and nut.

(4) Remove tags and connect wires to light terminals.

(5) Install terminal block cover.

(6) Install lamp.



R No. 2 Engine Compartment Light - Removal and Installation
R Figure 401

(7) Position light cover assembly on housing and secure with screws.

(8) Remove tag and close circuit breaker opened in Step 2A(1).

(9) Turn on electrical power (Ref. 24-41-00).

(10) Turn on light to test operation. Turn light off after test.

(11) Turn off electrical power (Ref. 24-41-00).

R (12) Close and secure access door 4339L (Ref. 6-40-00).

3. Relamping

A. No. 2 Engine Compartment Light

(1) Verify that light is turned off.

(2) Remove light cover assembly.

(3) Remove faulty lamp.

(4) Install replacement lamp.

(5) Turn on electrical power (Ref. 24-41-00).

(6) Turn on light to test lamp. Turn light off after test.

(7) Turn off electrical power (Ref. 24-41-00).

(8) Install light cover assembly.

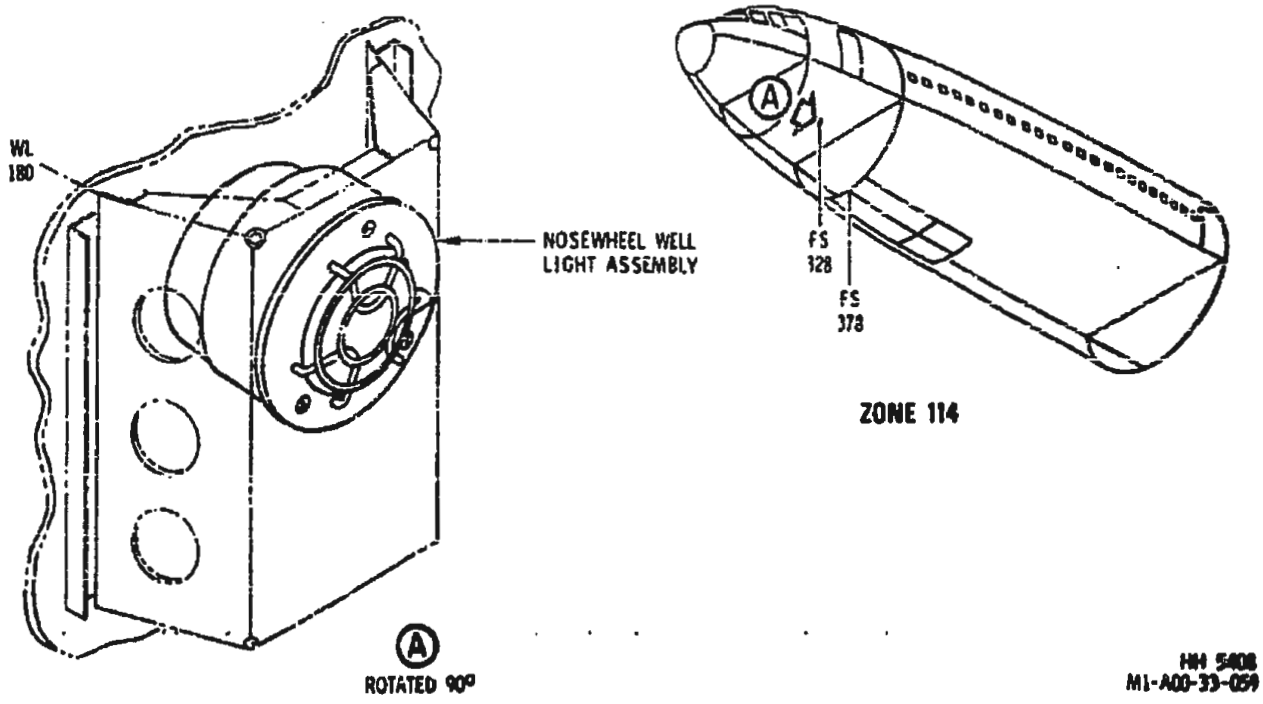
WHEEL WELL LIGHTING - DESCRIPTION AND OPERATION

1. General

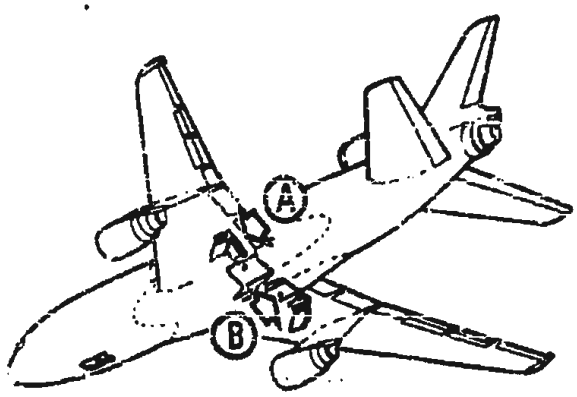
Wheel well lighting comprises three lights in each main wheel well and one light in the nose wheel well. The nose wheel well light (Ref. Fig. 1) and one light in each main wheel well (Ref. Fig. 2) provide general illumination and are identical to the service compartment lights (Ref. 33-32-00). The two truck lights in each main wheel well illuminate the landing gear.

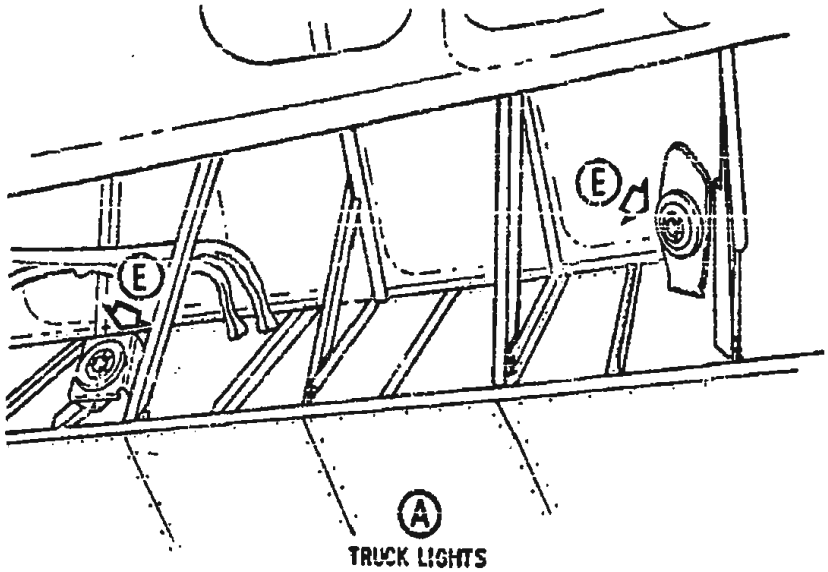
C On airplanes 001-031,
C each wheel well and truck light incorporates a 115/26.5V ac
C stepdown transformer.

C On airplanes 032-999,
C each wheel well light incorporates a 115/26.5V ac stepdown
C transformer. The truck lights incorporate a 115/10V ac stepdown
CR transformer. The truck lights incorporate a 115/10V ac (or
R 115/8.3V ac which is the recommended replacement for the 115/10V
R ac) stepdown transformer.

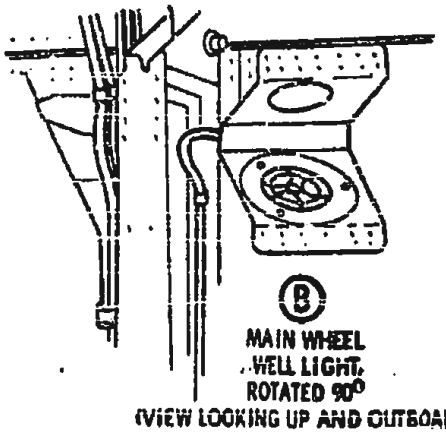


Nose Wheel Well Light
Figure 1





(A) TRUCK LIGHTS ROTATED 90°
(VIEW LOOKING UP AND AFT)



(B) MAIN WHEEL WELL LIGHT, ROTATED 90°
(VIEW LOOKING UP AND OUTBOARD)

M1-0000-33-1501

R
R

Main Wheel Well and Truck Light
Figure 2

EFFECTIVITY: ALL

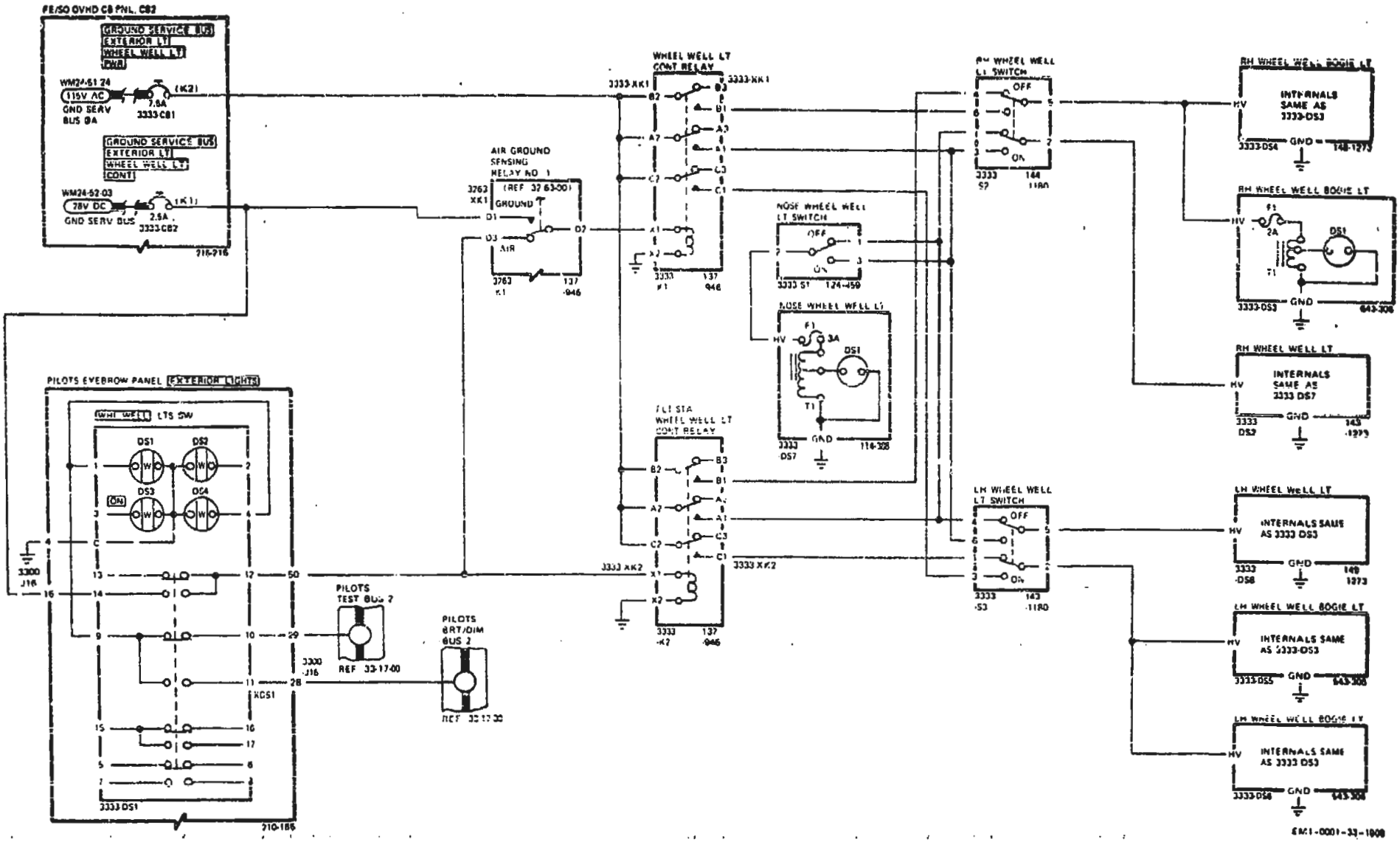
001B

2. Operation

All wheel well lights can be simultaneously controlled from the flight station by the EXTERIOR LIGHTS - WHEEL WELL switchlight on the eyebrow panel (Ref. Fig. 3).

The lights can also be controlled on the ground by a separate switch for each wheel well. An air-ground sensing relay
R provides an interlock which transfers power from CB3333-CB1(2K2)
R to the flight station control panel to allow power to be removed
R as required.

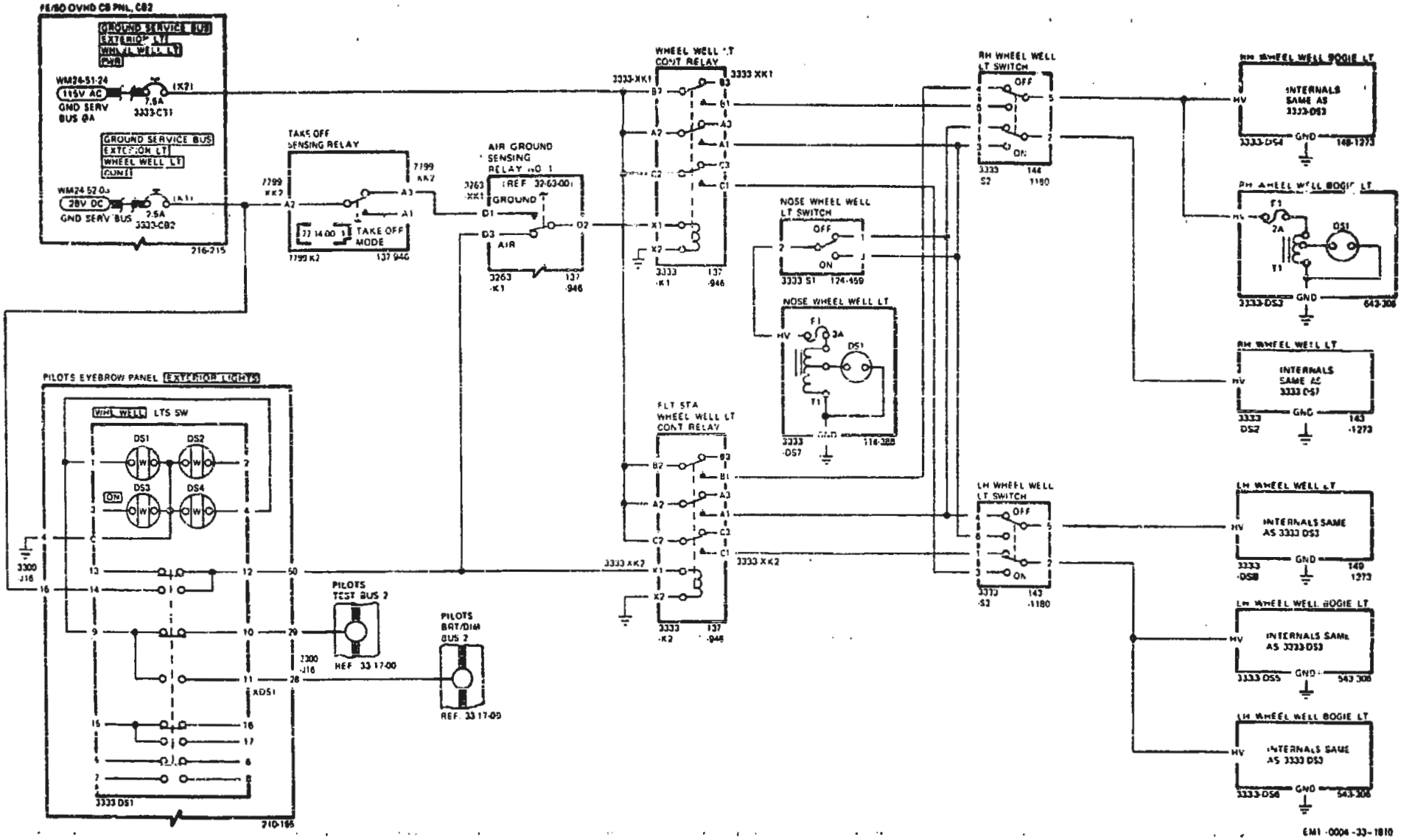
On aircraft 032-999, in series with the air-ground sensing relay is a take-off sensing relay which removes power from the wheel well lights while the aircraft is on the ground in the take-off mode.



R R Wheel Well Lighting Schematic
Figure 3

EFFECTIVITY: 001-031

001B



R R Whnel Well Lighting Schematic
Figure 3

EFFECTIVITY: 032-999

001B

R # WHEEL WELL LIGHTING - FAULT ISOLATION

R 1. General

R The electrical schematic in this section can be used for fault isolation any time a fault is reported or suspected. Due to the relative simplicity of the circuit, no detailed fault isolation procedures are provided. Refer to the Maintenance Manual Introduction for a more detailed discussion of the Fault Isolation Reporting Method (FIRM) and use of fault isolation diagrams/schematics.

R 2. Fault Isolation/Identification

R Table 101 lists the fault isolation diagrams and schematics in this section.

R Table 101

FIGURE	TITLE
101	Component Location Index
102	Component Locator Diagram
SCHEM 1	Wheel Well Lights Schematic

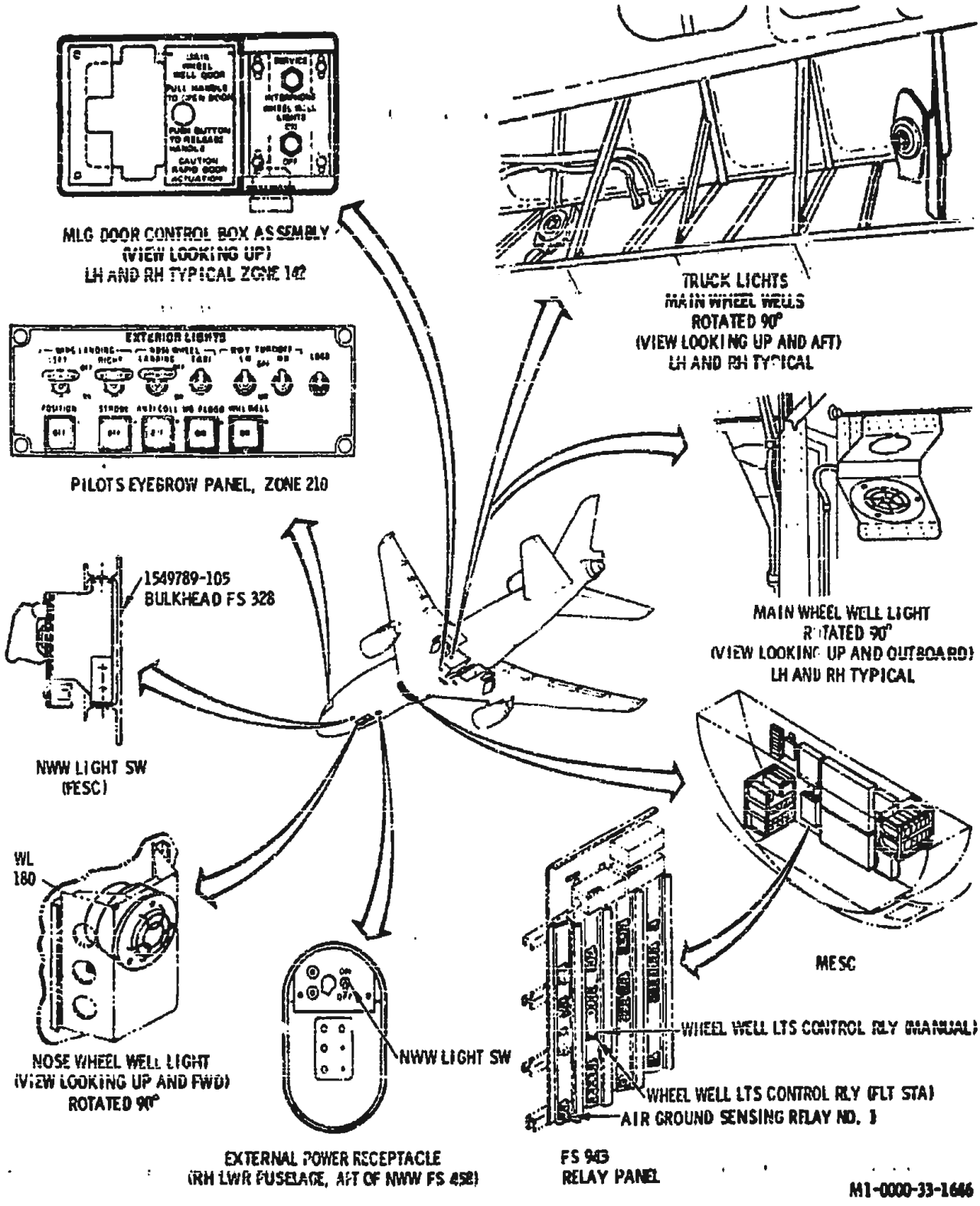
COMPONENT	QTY	AREA/ACCESS	REFERENCE
CIRCUIT BREAKERS:			
EXTERIOR/WHEEL WELL AND ENG CONTROL	1	FE/SO OVHD CB PNL CB2	24-61-00
EXTERIOR/WHEEL WELL AND ENG PWR	1	FE/SO OVHD CB PNL CB2	24-61-00
LIGHTS:			
LIGHT – RIGHT WHEEL WELL	1	RMWW – UPPER	33-33-00
LIGHT – LEFT WHEEL WELL	1	LMWW – UPPER	33-33-00
LIGHT – RIGHT WHEEL TRUCK	2	MWW – AFT WALL	33-33-00
LIGHT – LEFT WHEEL TRUCK	2	MWW – AFT WALL	33-33-00
LIGHT – NOSE WHEEL WELL	1	NWW – UPPER FWD	33-33-00
SWITCHES:			
SWITCH – RH WHEEL WELL LT	1	KEELSON – RMLG DOOR CONTROL BOX	32-21-00
SWITCH – LH WHEEL WELL LT	1	KEELSON – LMLG DOOR CONTROL BOX	32-21-00
SWITCH – NOSE WHEEL WELL LT	1	LWR FUSELAGE – EXT PWR RECEPTACLE	24-41-00
SWITCH – NOSE WHEEL WELL LT	1	FESC – ADJACENT NG VIEWER	32-21-00
SWITCH – WHEEL WELL	1	FLT STA, PILOT EYEBROW PNL, P4	33-33-00
RELAYS:			
RELAY – AIR GROUND SENSING NO. 1	1	MESC – 192K RELAY PNL	33-33-01
RELAY – WHEEL WELL LT CONTROL	1	MESC – 192K RELAY PNL	33-33-01
RELAY – WHEEL WELL LT CONTROL	1	MESC – 192K RELAY PNL	33-33-01

*SEE WM EQUIPMENT LIST

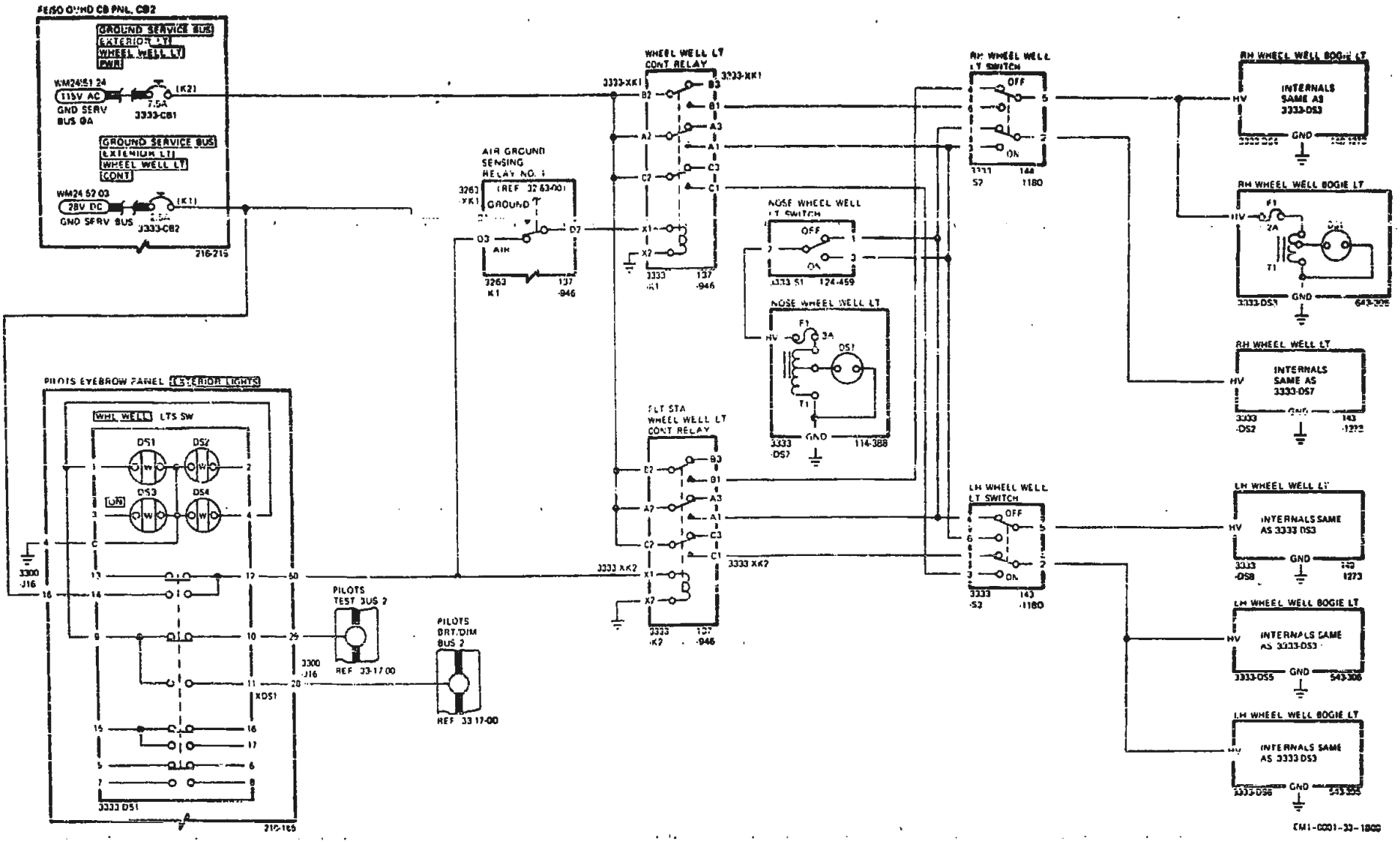
M1-0000-33-1646

R Component Locator Index
R Figure 101

R EFFECTIVITY: ALL



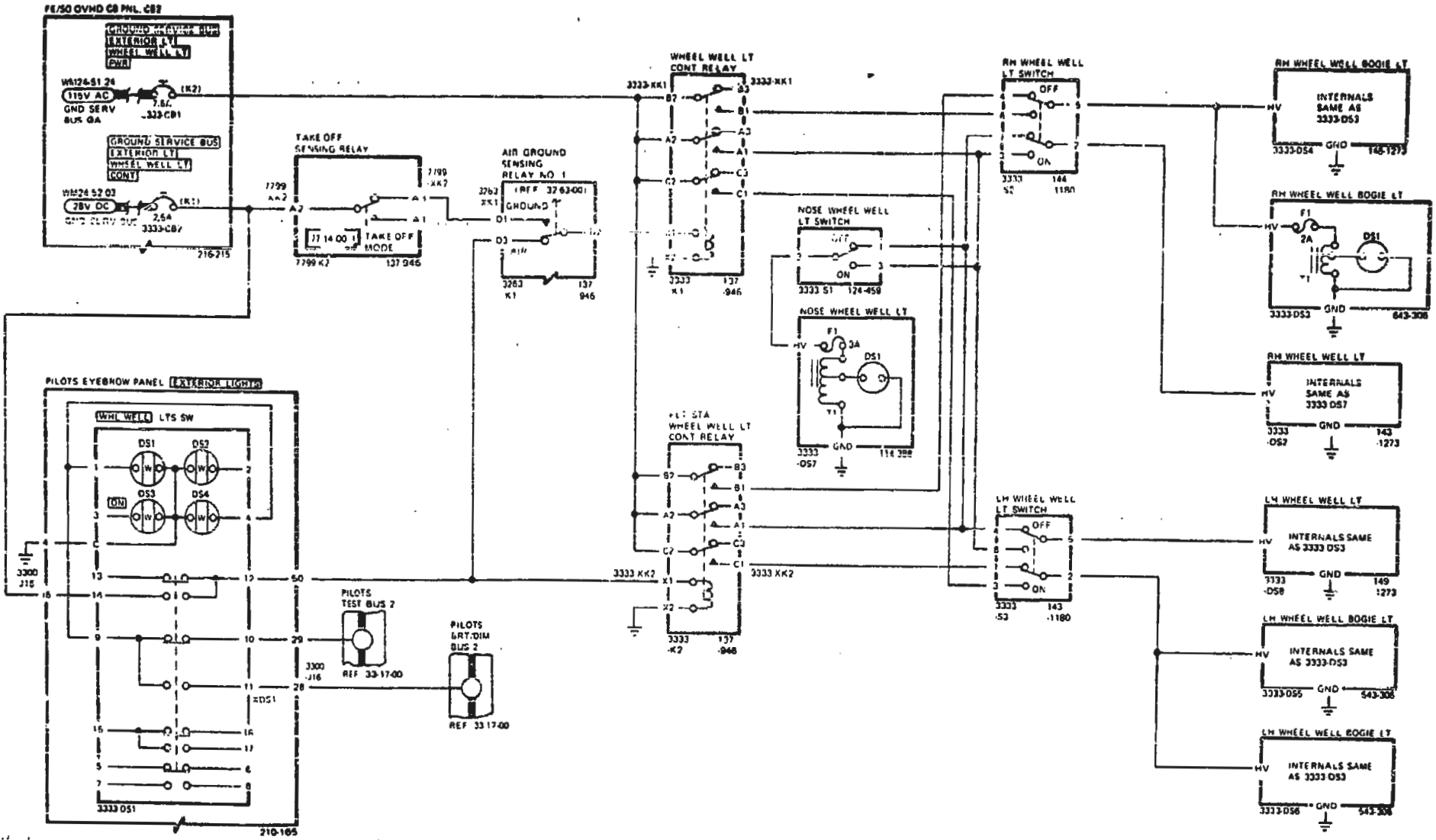
Component Locator Diagram
Figure 102



R Wheel Well Lighting Schematic
R SCHEM 1

EFFECTIVITY: 001-031

0018



R R Wheel Well Lighting Schematic
SCHEM 1

EFFECTIVITY: 032-999

001e

WHEEL WELL LIGHTING - ADJUSTMENT AND TEST

1. Referenced Procedure

24-41-00 External Power/Ground Service System - Maintenance Practices

2. Adjustment/Test

A. Operational Test

(1) Turn on electrical Power (Ref. 24-41-00).

(2) On Flight Engineer/Second Officers overhead circuit breaker panel CB2, zone 215, verify that circuit breakers GROUND SERVICE BUS - EXTERIOR LT - WHEEL WELL & ENG - CONT (K1) and PWR (K2) are closed.

(3) At the external power receptacle area, place the nosewheel well service light switch in the on position and verify that the service light comes on.

(4) Place the nosewheel well service light switch in the off position and verify that the service light goes out.

(5) At the main wheel well right and left ground service switch panels, place the MAIN WHEEL WELL - LIGHTS switch in ON position and verify that the main wheel well service light and both truck lights come on.

(6) Place the MAIN WHEEL WELL - LIGHTS switch in OFF position and verify that the wheel well service light and both truck lights go out.

(7) At the EXTERIOR LIGHTS section of the eyebrow panel, zone 210, depress the WHEEL WELL switchlight to the on position. Verify that the switchlight legend ON illuminates and the nosewheel well service light and the left and right main wheel well and truck lights come on.

(8) Depress the WHEEL WELL switchlight to the off position and verify that the switchlight legend goes out. Verify that all wheel well lights go out.

(9) On aircraft 032-999, check that the wheel well lights go out when the

R R aircraft is in the take off mode on the ground as follows:

R (a) Position MAIN WHEEL WELL - LIGHTS switches to ON.

R R (b) Position flap control handle to (22°) take off position.

R R (c) Remove Flight Engineer/Second Officers ENGINE STATUS panel and disconnect P5 connector.

R R (d) Jumper P5, pin 12 to ground and verify that main wheel well lights go out.

R (e) Remove jumper and re-connect P5 connector.

R (f) Replace ENGINE STATUS panel.

R (g) Return flap control handle to the 0° position.

R (10) Turn off electrical power (Ref. 24-41-00).

NOSEWHEEL WELL LIGHT - REMOVAL AND INSTALLATION

1. Referenced Procedure

24-41-00 External Power/Ground Service System - Maintenance Practices

2. Removal/Installation

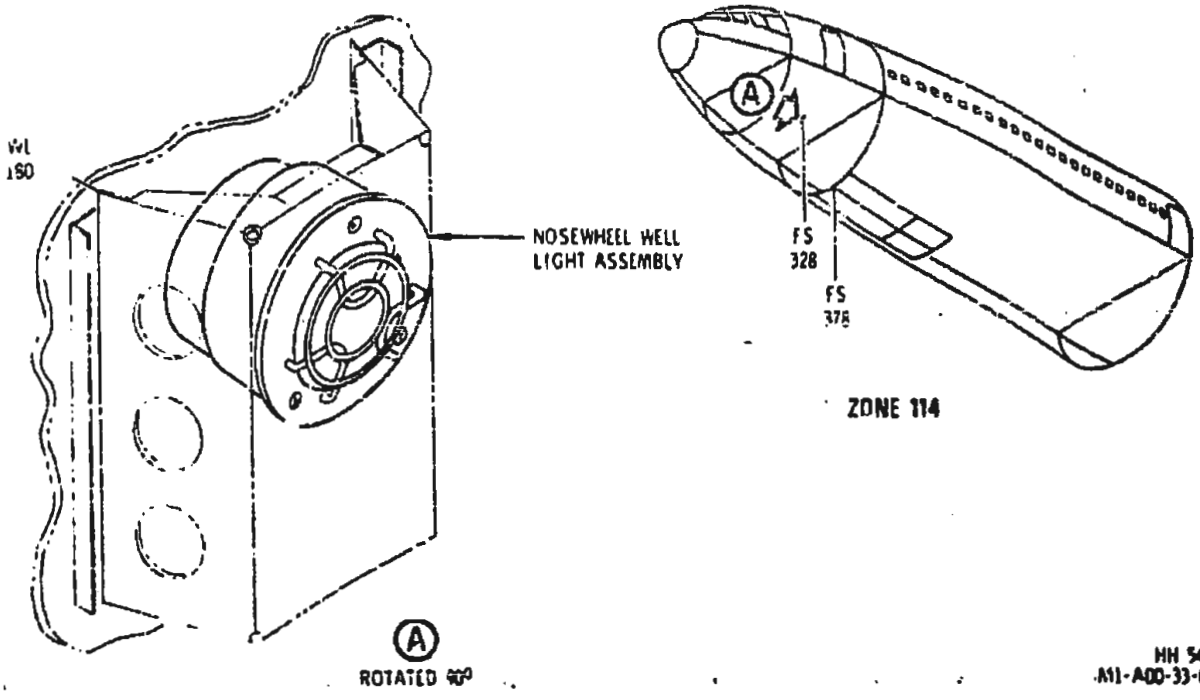
A. Removal

(1) On Flight Engineer/Second Officers overhead circuit breaker panel CB2, zone 215, open and tag circuit breaker GROUND SERVICE BUS - EXTERIOR LT - WHEEL WELL & ENG - CONT (K1) and PWR (K2). R

(2) Remove screws securing lens to light assembly (Ref. Fig. 401); allow lens to hang by lanyard.

(3) Remove lamp.

(4) Remove terminal block cover.



Nosewheel Well Light - Removal and Installation
Figure 401

(5) Disconnect and tag wires on light terminals.

(6) Remove screws securing light to mount.

(7) Loosen connector seal nut and remove light by withdrawing wires from housing.

B. Installation

(1) Verify that circuit breaker opened in Step 2A(1) is open and tagged.

(2) Feed wires into light housing, then install connector seal and nut.

(3) Secure light to mount with screws.

(4) Remove tags and reconnect wires to light terminals.

(5) Install lamp.

(6) Position lens and secure with screws.

(7) Remove tag and close circuit breaker opened in Step 2A(1).

3. Relamping

A. Nosewheel Well Light

(1) Verify that wheel well lights are off.

(2) Remove lens from light and allow to hang by lanyard.

(3) Remove faulty lamp.

(4) Install replacement lamp.

(5) Turn on electrical power (Ref. 24-41-00).

(6) Turn on wheel well lights to test lamp. Turn lights off after test.

(7) Turn off electrical power (Ref. 24-41-00).

(8) Install lens on nosewheel well light.

MAIN WHEEL WELL LIGHT - REMOVAL AND INSTALLATION

1. Referenced Procedure

   24-41-00 External Power/Ground Service System - Maintenance Practices

2. Removal/Installation

   A. Removal

      (1) On Flight Engineer/Second Officers overhead circuit breaker panel CB2, zone 215, open and tag circuit breaker GROUND SERVICE BUS - EXTERIOR LT - WHEEL WELL & ENG. - CONT (K1) and PWR (K2)

R

      (2) Remove screws securing lens to light assembly (Ref. Fig. 401); allow lens to hang by lanyard.

      (3) Remove lamp.

      (4) Remove terminal block cover.

      (5) Disconnect and tag wires on light terminals.

      (6) Remove screws securing light to structure.

      (7) Loosen connector seal nut and remove light by withdrawing wires from housing.

   B. Installation

      (1) Verify that circuit breaker opened in Step 2A(1) is open and tagged.

      (2) Feed wires into light housing, then install connector seal and nut.

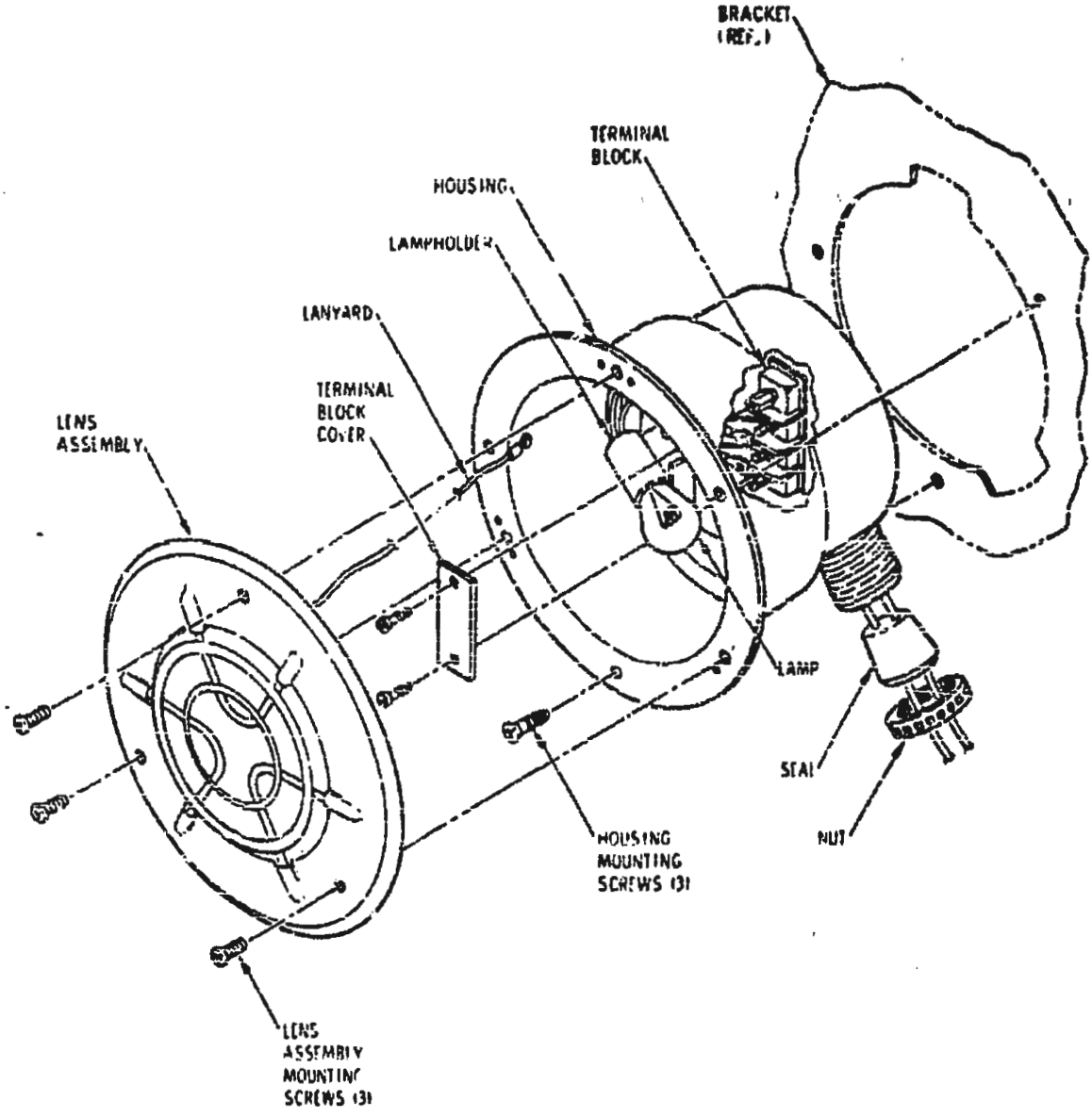
      (3) Secure light to structure with screws.

      (4) Remove tags and reconnect wires to terminals on light.

      (5) Install lamp.

      (6) Position lens and secure with screws.

      (7) Remove tag and close circuit breaker opened in Step 2A(1).



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AM-0100-33-060

Main Wheel Well Light - Removal and Installation
Figure 401

3. Relamping

A. Main Wheel Well Light

(1) Verify that wheel well lights are off.

(2) Remove lens from light and allow to hang by lanyard.

(3) Remove faulty lamp.

(4) Install replacement lamp.

(5) Turn on electrical power (Ref. 24-41-00).

(6) Turn on wheel well lights to test lamp. Turn lights off after test.

(7) Turn off electrical power (Ref. 24-41-00).

(8) Install lens on main wheel well light.

TRUCK LIGHTS - REMOVAL AND INSTALLATION

1. Referenced Procedure

24-41-00 External Power/Ground Service System - Maintenance Practices

2. Removal/Installation

A. Removal

(1) On the Flight Engineer/Second Officers overhead circuit breaker panel CB2, zone 215, open and tag circuit breaker GROUND SERVICE BUS - EXTERIOR LT - WHEEL WELL & ENG - CONT (K1) and PWR (K2).

(2) Remove screws securing lens assembly, remove lens assembly and allow to hang by lanyard (Ref. Fig. 401)

CR (3) Remove lamp.

CR (4) Remove terminal block cover. Disconnect and tag wires
CR on light terminals.

CR (5) Remove nut and seal from electrical connector, and
CR withdraw wires.

CR (6) Remove screws securing light to bracket and remove
CR light.

B. Installation

(1) Verify that circuit breaker opened in Step 2A(1) is open and tagged.

CR (2) Position light on bracket and secure with screws.

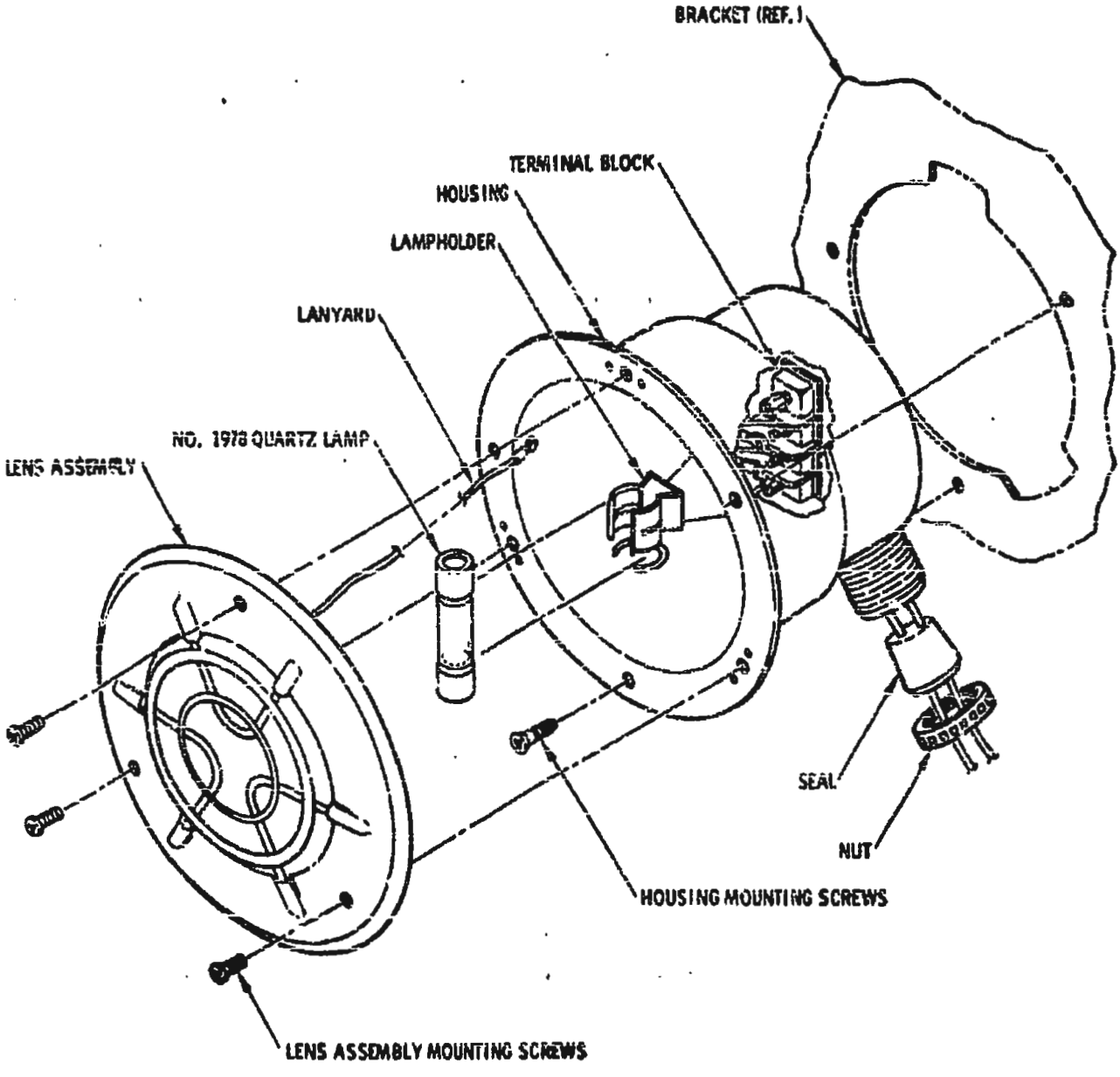
CR (3) Insert wires through connector and install seal and
CR nut.

CR (4) Connect wire to terminals.

CR (5) Install lamp.

CR (6) Position lens and secure with screws.

CR (7) Remove tag and close circuit breaker opened in Step
CR 2A(1).



NOTE

DO NOT ALLOW FINGERS TO TOUCH LAMP. OILS FROM SKIN MAY CAUSE THE LAMP TO EXPLODE WHEN VOLTAGE IS APPLIED

MI-0000-33-1410

R Main Wheel Well Truck Lights - Removal and Installation
R Figure 401

EFFECTIVITY: ALL

001B

(8) Turn on electrical power (Ref. 24-41-00).

(9) Using either the WHEEL WELL switchlight in the flight station or the wheel well ground service switch, turn on wheel well lights and verify that the truck light comes on. Turn off the switch and verify the lights go out.

(10) Turn off electrical power (Ref. 24-41-00).

3. Relamping

A. Truck Light

(1) Verify that wheel well lights switches are placed in the off position.

(2) Remove screws securing lens assembly; remove lens assembly and allow to hang by lanyard.

CR (3) Remove faulty lamp.

CR WARNING: DO NOT ALLOW FINGERS TO TOUCH FLASHTUBE LAMP.
CR OILS FROM SKIN MAY CAUSE LAMP TO EXPLODE WHEN
CR VOLTAGE IS APPLIED.

CR (4) Install replacement lamp.

(5) Install lens assembly and secure with screws.

(6) Turn on electrical power (Ref. 24-41-00).

(7) Using either the WHEEL WELL switchlight in the flight station or the wheel well ground service switch, turn on wheel well lights and verify that truck light comes on. Turn off the switch and verify truck light goes out.

(8) Turn off electrical power (Ref. 24-41-00).

NOSEWHEEL WELL LIGHT SWITCH - REMOVAL AND INSTALLATION

1. Referenced Procedure

24-41-00 External Power/Ground Service System - Maintenance Practices

2. Removal/Installation

A. Removal

(1) On Flight Engineer/Second Officers overhead circuit breaker panel CB2, zone 215, open and tag circuit breakers EXTERIOR LT - WHEEL WELL LT - WHEEL WELL LT - CONT(K1) and PWR(K2).

R WARNING: EXTERNAL POWER MUST BE DISCONNECTED FROM AIRCRAFT (Ref. 24-41-00).

(2) Open access door 124AB to the ac power receptacle, zone 124, FS 458.

(3) Remove screws securing panel containing NOSE WHEEL WELL LIGHT switch (Ref. Fig. 401), interphone jack, and external power indicators. Allow panel to hang by wires.

(4) Tag and remove wires on nosewheel well light switch.

(5) Remove attaching hardware securing switch and remove switch.

B. Installation

(1) Verify that circuit breakers opened in Step 2A(1) are open and tagged.

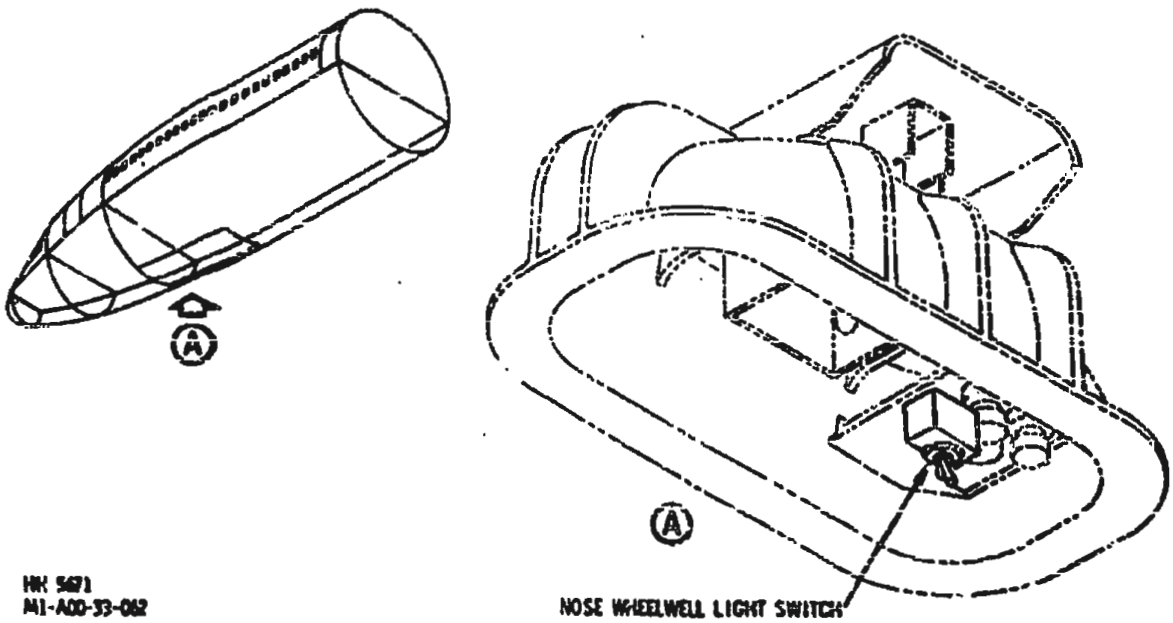
(2) Install switch in panel and secure with attaching hardware.

(3) Reconnect wires to switch, and remove tags.

(4) Install panel, and secure with screws.

(5) Remove tags and close circuit breakers opened in Step 2A(1).

(6) Close and lock access door.



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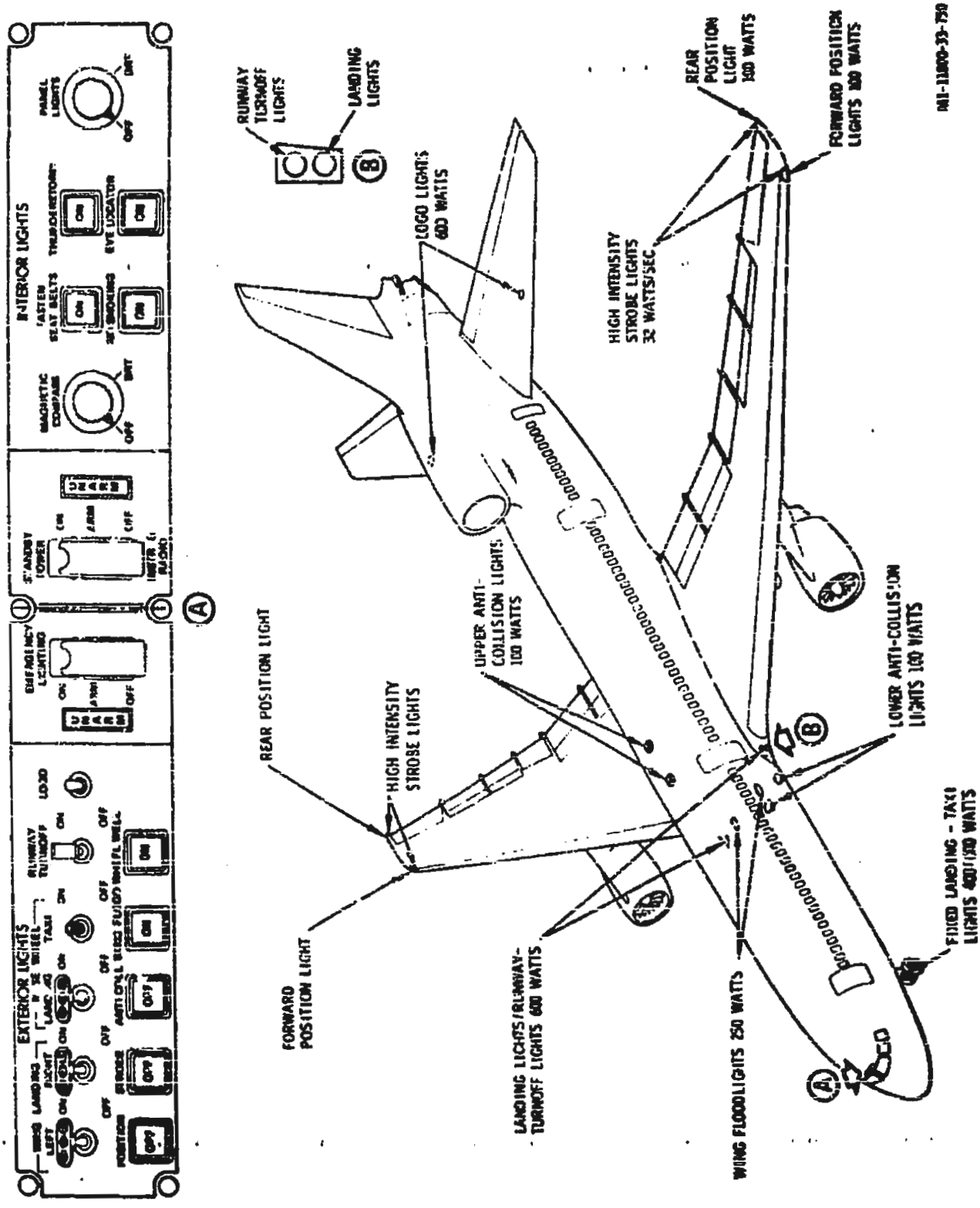
R Nosewheel Well Light Switch - Removal and Installation
R Figure 401

EXTERIOR LIGHTING - DESCRIPTION AND OPERATION

1. General

R Aircraft exterior lighting includes the anticollision, strobe, landing, taxi, runway turnoff, position, logo, and wing flood lights. The lights are controlled by switches on the EXTERIOR LIGHTS section of the eyebrow panel in the flight station (Ref. Fig. 1). Wheel well lights (Ref. 33-33-00) are also controlled from the EXTERIOR LIGHTS panel.



R R Exterior Lighting and Controls
Figure 1

EXTERIOR LIGHTING - ADJUSTMENT AND TEST

1. Referenced Procedure

24-41-00 External Power/Ground Service Systems - Maintenance Practices

2. Adjustment/Test

A. Operational Test

(1) Turn on electrical power (Ref. 24-41-00).

(2) On Flight Engineer/Second Officers overhead circuit breaker panel CB2, zone 215, verify that the following circuit breakers are closed:

WHEEL WELL LT - CONT and PWR (K1, K2)

WING POSITION

FWD - NO. 1 and NO. 2 (K3, K4)

AFT - L and R (K5, K6)

LOGO LT - L and R (G1, G2)

WING FLOOD (G3)

RUNWAY TURNOFF LH (G4)

R On aircraft not incorporating SB33-042,
R STROBE (G5) and STROBE LT CONT (F4)

R On aircraft incorporating SB33-042,
R STROBE LT CONT (F4)

NOSE GEAR LT - CONT, LAND, and TAXI (G6, G7, G8)

WING LANDING - LH and RH (G9, G10)

RUNWAY TURNOFF RH (G11)

On Flight Engineer/Second Officers aft circuit breaker panel CB3, zone 215, verify that the following circuit breakers are closed:

ANTI-COLLISION

LOWER - LH and RH (J15, J16)

UPPER - FWD and AFT (J17, J18)

(3) Operate each EXTERIOR LIGHTS toggle switch (upper row) and switchlight (lower row) on the eyebrow panel, zone 210, and:

(a) Check that associated exterior lights come on.

(b) Check that switchlight legends light ON or OFF, as applicable.

NOTE: On aircraft that have SB33-064 accomplished, with a nominal input of 115 VAC to the position lights reactor, the following reactor voltages should be measured, with the position lights on.

PIN K 100-106 VAC

PIN B 100-106 VAC

PIN D 105-111 VAC

PIN J 105-111 VAC (ANTICOLLISION LIGHT SWITCH MUST BE ON)

(4) Turn off electrical power (Ref. 24-41-00).

ANTICOLLISION AND STROBE LIGHTING - DESCRIPTION AND OPERATION

1. General

Two rotating anticollision lights are installed in tandem on top of the fuselage, zones 253 and 254, and two side-by-side on the bottom of the fuselage, zone 142. The strobe light anticollision system consists of four high-intensity, capacitor-discharge (white strobe) fixtures and a flasher unit. The forward strobe lights are mounted in the wingtips, zones 535 and 635, outboard of the forward position lights. The rear strobe lights are incorporated in the rear position light fixtures, zones 535 and 635. The flasher unit is in the mid electrical service center MESC, zone 137.

The anticollision and strobe lights are in use whenever the aircraft is in operation; the ANTI COLL and STROBE switchlights on the eyebrow panel have an illuminated legend indicating OFF when these lights are not in use. The legend extinguishes when the lights are on.

2. Operation

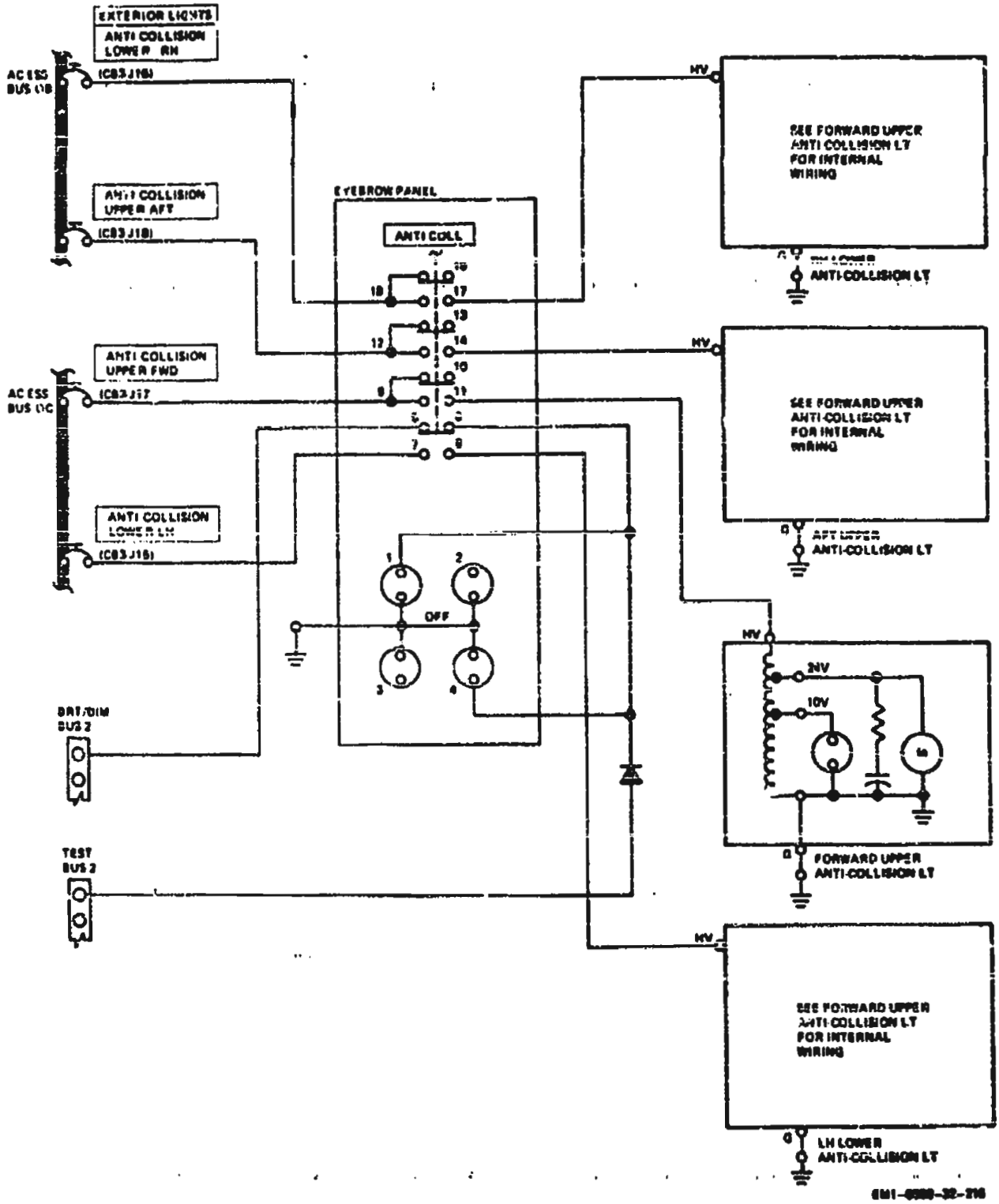
The ac essential bus supplies 115V ac, 400-Hz, Phase C power to the upper forward and lower left anticollision lights, and Phase B power to the upper aft and lower right anticollision lights (Ref. Fig. 1). Circuit protection is provided by the ANTI-COLLISION UPPER FWD and UPPER AFT, and LOWER LH and LOWER RH circuit breakers on the Flight Engineer/Second Officers aft circuit breaker panel CB3, zone 215. When the ANTI COLL switchlight on the eyebrow panel is actuated, power is applied
R to all four rotating anticollision lights.

R The AC bus 1 provides 115V ac, 400 Hz, phase C power through the STROBE lights remote controlled circuit breaker to the flasher unit when the STROBE switchlight on the eyebrow panel is actuated, causing the strobe lights to flash (Ref. Fig. 2).

3. Anticollision Lights

A. Description and Operation

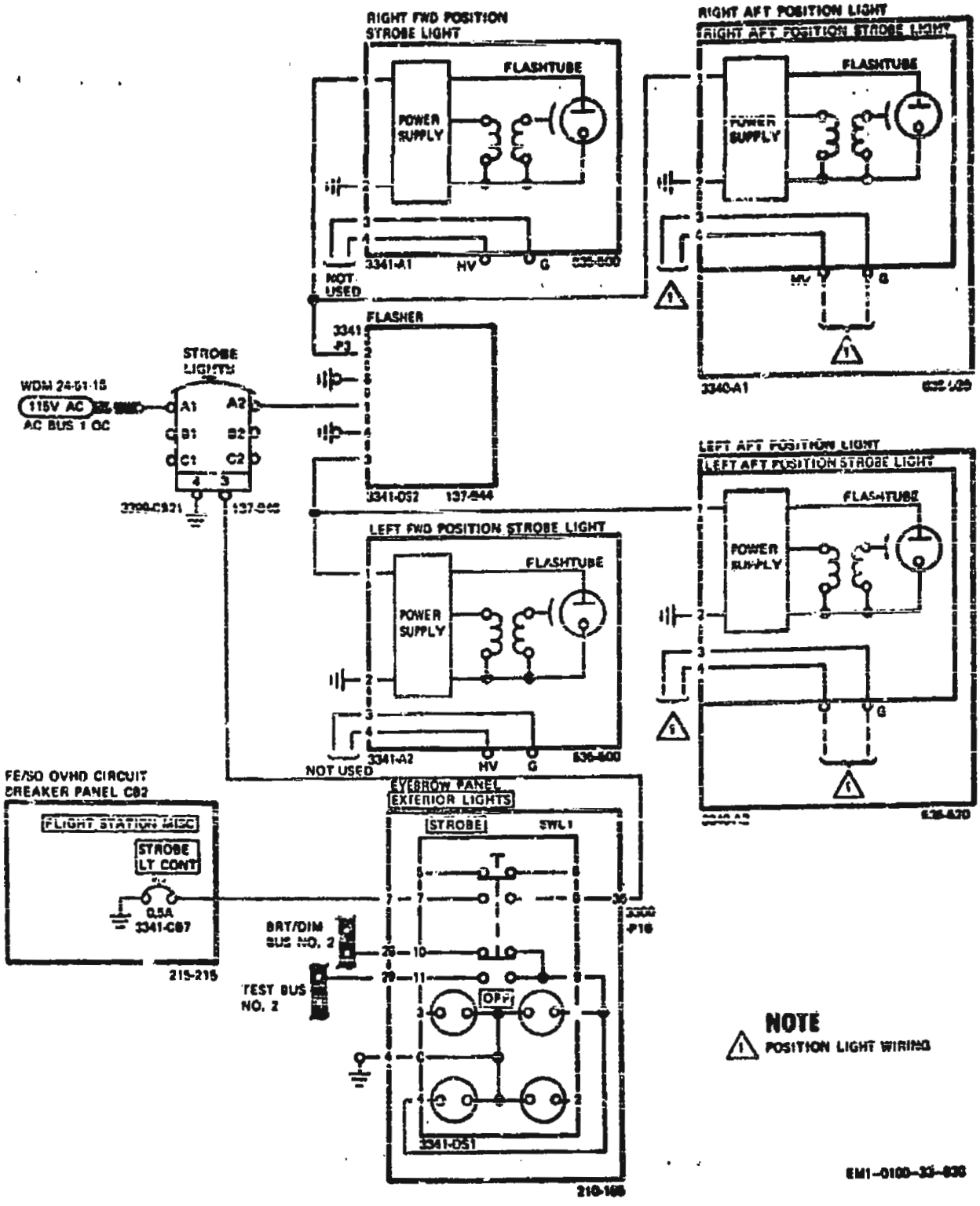
The light assembly contains a motor and an autotransformer with two taps. The autotransformer steps down the 115V ac supply to 24V ac for the motor, and 10V ac for the lamp. The motor drives a rotating reflector at approximately 45 revolutions per minute.



R
R Anticollision Lights Schematic Diagram
Figure 1

EFFECTIVITY: ALL

001B



Strobe Lights Schematic
Figure 2

4. Strobe Lights

A. Description and Operation

The strobe light fixture contains a power supply and xenon type flashtube. Each time the power supply is triggered by a pulse from the flasher, the power supply applies a pulse to the strobe flash tube. The strobe flash duration is from 1.0 to 1.5 milliseconds.

5. Strobe Flasher

A. Description and Operation

On aircraft 001-031 w/o SB33-030
the strobe flasher contains a timing circuit that causes it to operate at a frequency of approximately 70 flashes per minute.

On aircraft 001-031 with SB33-030&032-999
the strobe flasher contains a timing circuit that causes it to operate at a frequency of approximately 60 flashes per minute.

The on/off ratio of the flash is 7:3. The strobe flasher triggers the strobe light power supply.

R ANTICOLLISION AND STROBE LIGHTING - FAULT ISOLATION

R 1. General

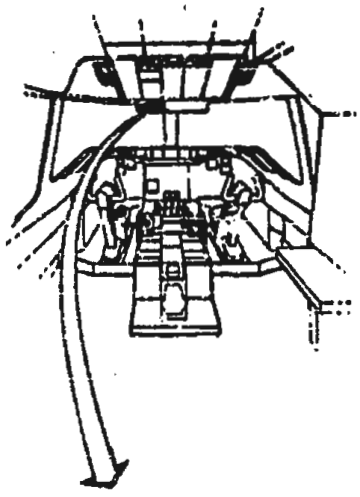
R The electrical schematic in this section can be used for fault isolation any time a fault is reported or suspected. Due to the relative simplicity of the circuit, no detailed fault isolation procedures are provided. Refer to the Maintenance Manual Introduction for a detailed discussion of the Fault Isolation Reporting Method (FIRM) and use of fault isoltion diagram/schematics.

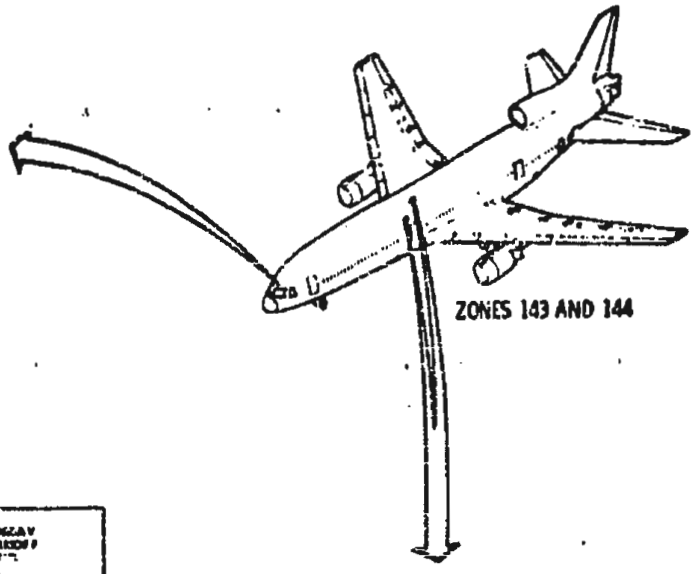
R 2. Fault Isolation/Identification

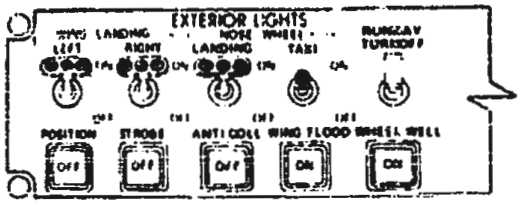
R Table 101 lists the fault isolation diagram and schematics in this section.

R Table 101

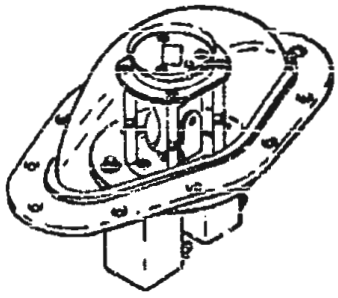
R FIGURE	TITLE
R 101	Component Locator Diagram
R SCHEM 1	Anticollision Strobe Lights Schematic
R SCHEM 2	Strobe Light Schematic



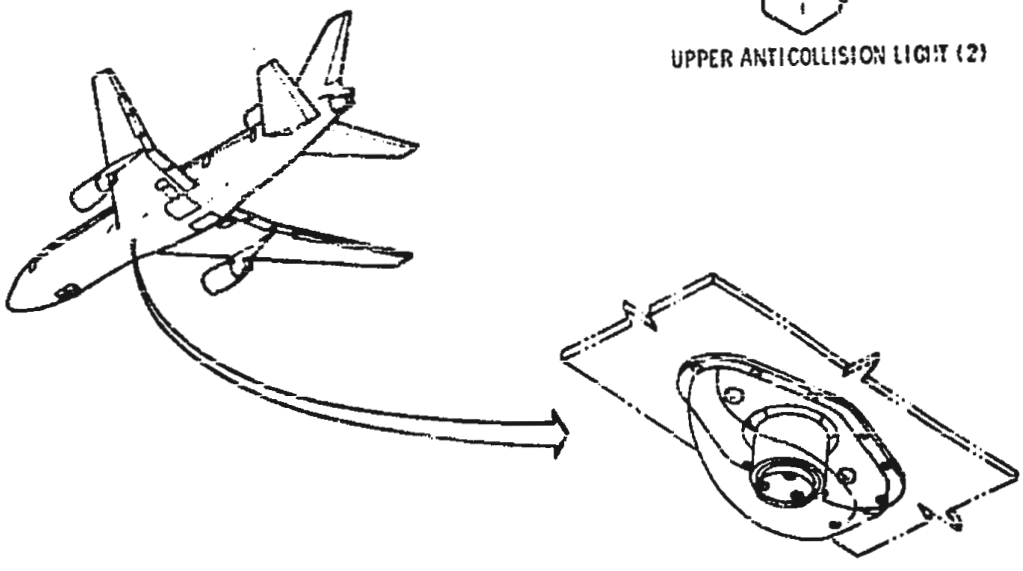




EXTERIOR LIGHTS CONTROL PANEL



UPPER ANTICOLLISION LIGHT (2)

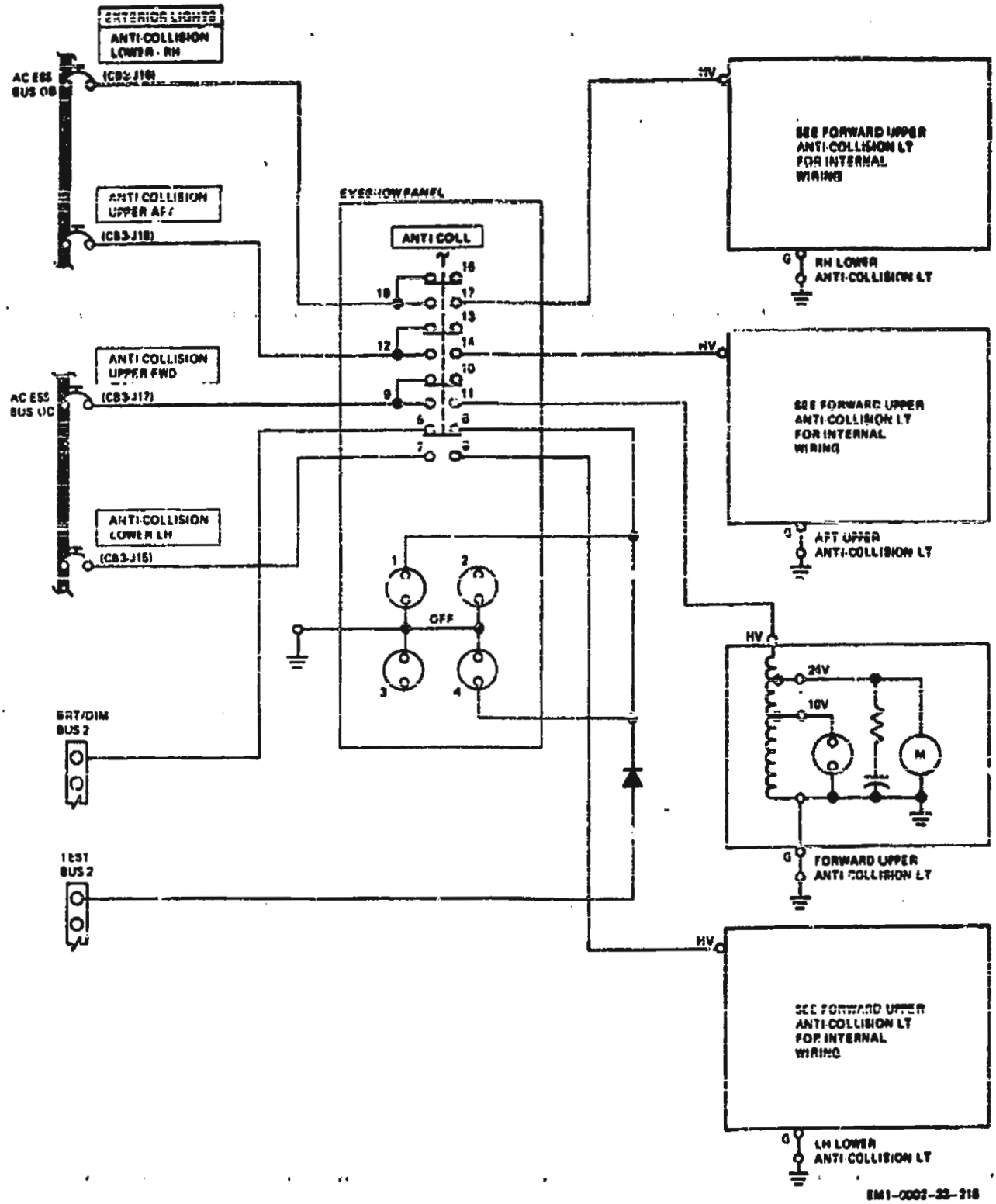


LOWER ANTICOLLISION LIGHT

M1-0000-33-5146

R Component Locator Diagram
R Figure 101

R EFFECTIVITY: ALL
R
001B

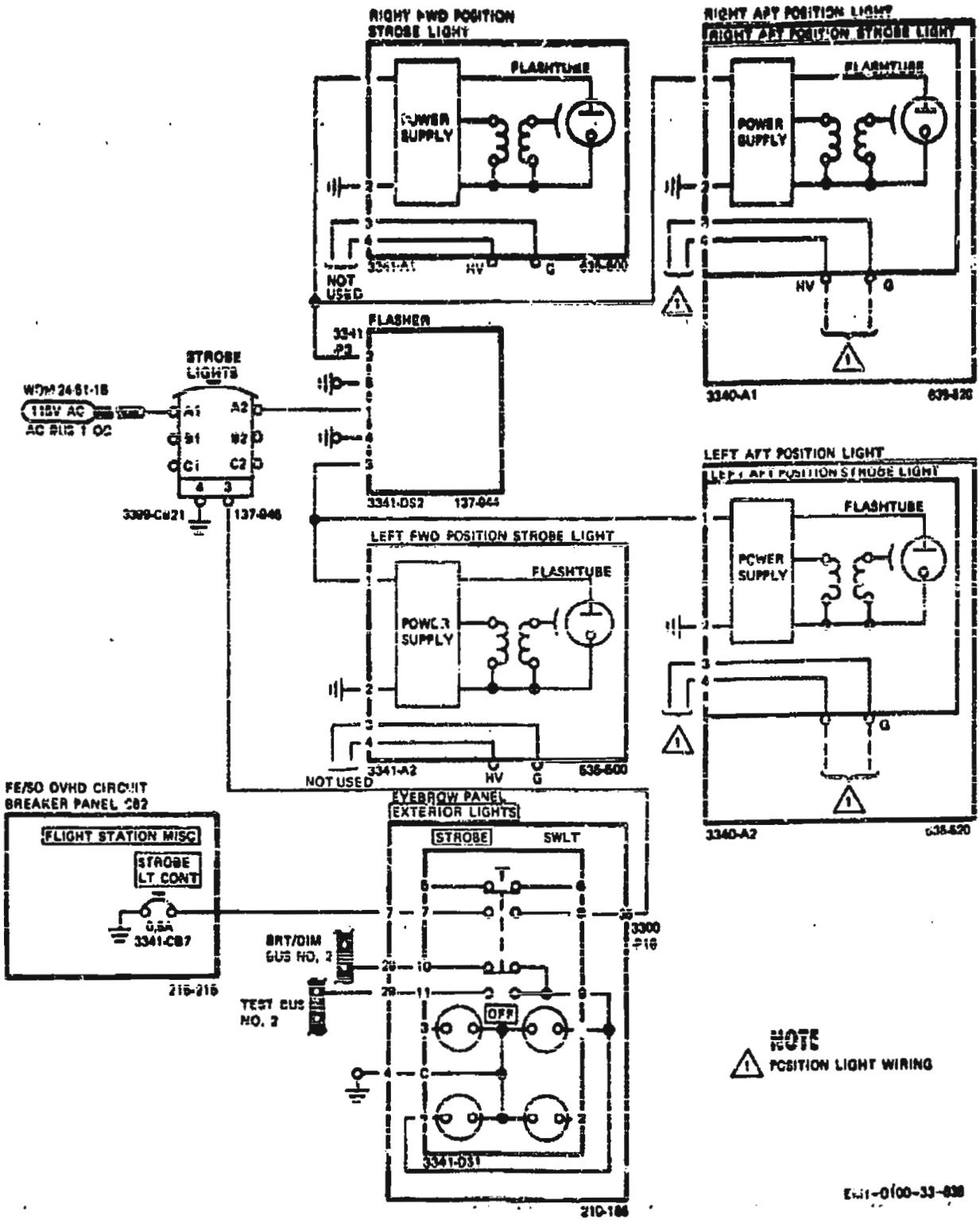


EM1-0002-33-216

R R Anticollision Lights Schematic
SCHEM 1

R R EFFECTIVITY: ALL

001B



Strobe Lights Schematic
SCHEM 2

EFFECTIVITY: ALL

UPPER ANTICOLLISION LIGHT - REMOVAL AND INSTALLATION

NOTE: Removal and installation may be achieved from inside or outside the aircraft.

1. Equipment and Materials

Aerial Maintenance Platform, Model 85 HDH, Pitman Mfg. Co., or equivalent

Sealant, PR7401K, Products Research Corp., or equivalent

Sealant, PR8501K, Products Research Corp., or equivalent

Adhesive, RTV157, General Electric, or equivalent

2. Referenced Procedure

24-41-00 External Power/Ground Service System - Maintenance Practices

3. Removal/Installation (Outside)

A. Removal

(1) On Flight Engineer/Second Officers aft circuit breaker panel CB3, zone 215, open and tag circuit breaker EXTERIOR LIGHTS - ANTICOLLISION - UPPER - FWD (J17) or AFT (J18), as applicable.

R WARNING: DANGEROUS VOLTAGE. ALLOW 30 SECONDS FOR CAPACITORS IN THE ANTICOLLISION LIGHT ASSEMBLY TO DISCHARGE AFTER DEENERGIZING.

(2) Gain access to light on top of fuselage with aerial maintenance platform (Ref. Fig. 401).

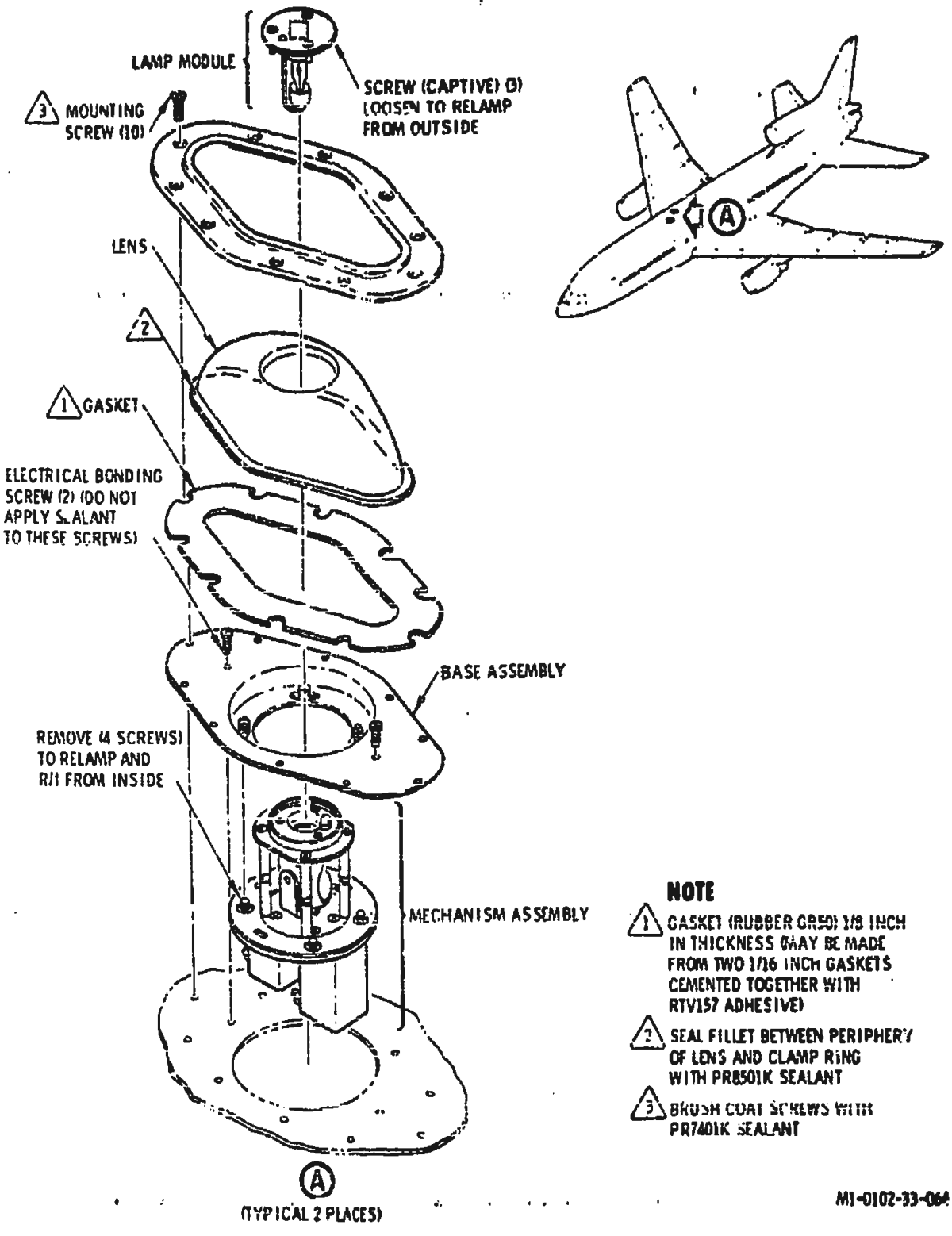
(3) Remove lens.

(4) Remove anticollision light mounting screws.

(5) Withdraw light sufficiently to expose terminal block. Disconnect and tag wires.

(6) Remove anticollision light.

B. Installation


LAMP MODULE
SCREW (CAPTIVE) (3) LOOSEN TO RELAMP FROM OUTSIDE
3 MOUNTING SCREW (10)
LENS
2
1 GASKET
ELECTRICAL BONDING SCREW (2) (DO NOT APPLY SEALANT TO THESE SCREWS)
BASE ASSEMBLY
REMOVE (4 SCREWS) TO RELAMP AND R/I FROM INSIDE
MECHANISM ASSEMBLY
A
(TYPICAL 2 PLACES)
A
NOTE
1 GASKET (RUBBER GR50) 1/8 INCH IN THICKNESS MAY BE MADE FROM TWO 1/16 INCH GASKETS CEMENTED TOGETHER WITH RTV157 ADHESIVE)
2 SEAL FILLET BETWEEN PERIPHERY OF LENS AND CLAMP RING WITH PR8501K SEALANT
3 BRUSH COAT SCREWS WITH PR7401K SEALANT
M1-0102-33-064

R R Upper Anticollision Light - Removal and Installation
Figure 401

(1) Verify that circuit breaker opened in Step 3A(1) is open and tagged.

(2) Gain access to top of fuselage with aerial maintenance platform (Ref. Fig. 401).

(3) Remove tags and connect wires to light terminals.

NOTE: The two large screws which bond the lamp electrically must be kept clear of sealant.

(4) Set light in position and install mounting screws.

(5) Install lens. (Verify that lens drain holes are plugged; drain holes are used only for lower lights.)

(6) Remove tag and close circuit breaker opened in Step 3A(1).

R 4. Removal/Installation (Inside)

R A. Removal

R (1) On Flight Engineer/Second Officers aft circuit breaker
R panel CB3, zone 215, open and tag circuit breaker
R EXTERIOR LIGHTS - ANTICOLLISION - UPPER - FWD - (J17)
R OR AFT (J18) as applicable.

R WARNING: DANGEROUS VOLTAGE. ALLOW 30 SECONDS FOR
R CAPACITORS IN THE ANTICOLLISION LIGHT ASSEMBLY TO
R DISCHARGE AFTER DEENERGIZING.

R (2) Gain access to light through ceiling panel.

R (3) Disconnect and tag wires from exposed terminal block.

R (4) Remove (4) four screws securing mechanism assembly to
R base assembly (Ref. Fig. 401).

R (5) Remove anticollision light.

R B. Installation

R (1) Verify that circuit breaker opened in Step 4A(1) is
R open and tagged.

R (2) Gain access to anticollision light base assembly
R through ceiling panel.

R (3) Remove tags and connect wires to terminal block on
R mechanism assembly (Ref. Fig. 401).

(4) Set mechanism assembly in position and install mounting screws.

(5) Remove tag and close circuit breaker opened in Step 4A(1).

(6) Turn on anticollision lights for test. Turn off after test.

(7) Turn off electrical power (Ref. 24-41-00).

5. Relamping

NOTE: Upper anticollision light may be relamped from either inside or outside the aircraft.

A. Outside Relamping

(1) On EXTERIOR LIGHTS section of eyebrow panel, zone 210, verify that ANTI-COLL switchlight is in off position. (Switchlight will indicate OFF if electrical power is turned on.)

(2) Gain access to light on top of fuselage (Ref. Fig. 401).

(3) Remove access cover plate on light by loosening captive screws (Ref. Fig. 401).

(4) Remove faulty lamp.

R CAUTION: TIGHTEN LAMP SCREWS EVENLY.

(5) Install replacement lamp.

(6) Replace cover plate.

(7) Turn on electrical power (Ref. 24-41-00).

(8) Turn on anticollision lights to test lamp. Turn lights off after test.

(9) Turn off electrical power (Ref. 24-41-00).

B. Inside Relamping

(1) On EXTERIOR LIGHTS section of eyebrow panel, zone 210, verify that ANTI-COLL switchlight is in off position. (Switchlight will indicate OFF if electrical power is turned on.)

(2) Gain access to light mechanism above galley.

(3) Loosen captive fasteners and lower light mechanism.

R CAUTION: TIGHTEN LAMP SCREWS EVENLY.

(4) Remove faulty lamp and install replacement lamp.

(5) Replace light mechanism and secure with screws.

(6) Turn on electrical power (Ref. 24-41-00).

(7) Turn on anticollision lights to test lamp. Turn lights off after test.

(8) Turn off electrical power (Ref. 24-41-00).

LOWER ANTICOLLISION LIGHT - REMOVAL AND INSTALLATION

1. Referenced Procedure

24-41-00 External Power/Ground Service System - Maintenance Practices

2. Removal/Installation

A. Removal

(1) On Flight Engineer/Second Officers aft circuit breaker panel C83, zone 215, open and tag circuit breaker EXTERIOR LIGHTS - LOWER - LH or RH, as applicable (J15) or (J16).

R WARNING: DANGEROUS VOLTAGE. ALLOW 30 SECONDS FOR
R CAPACITORS IN ANTICOLLISION LIGHT ASSEMBLY TO
R DISCHARGE AFTER DEENERGIZING.

(2) Remove lens (Ref. Fig. 401).

(3) Remove anticollision light mounting screws.

(4) Withdraw light sufficiently to expose terminal block. Disconnect and tag wires.

(5) Remove anticollision light.

B. Installation

(1) Verify that circuit breaker open in Step 2A(1) is open and tagged.

(2) Connect wires to light terminals.

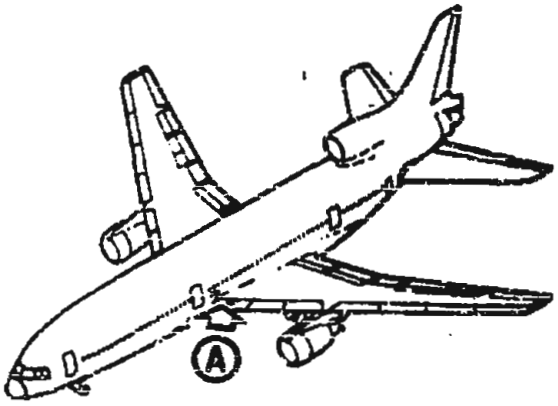
(3) Set light in position and tighten mounting screws (Ref. Fig. 401).

(4) Install lens gasket and lens. (Verify that drain holes in lens are open.)

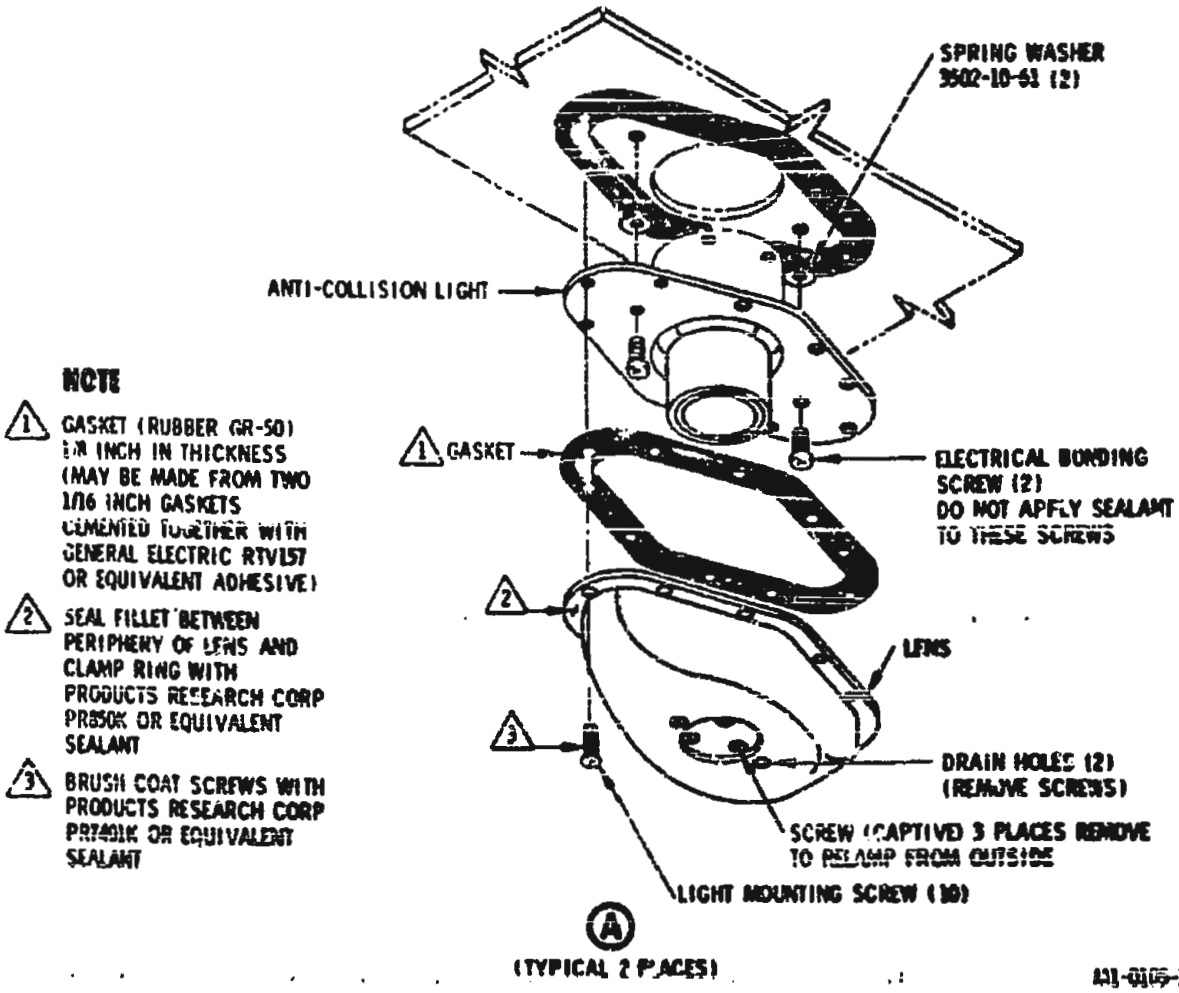
(5) Remove tag and close circuit breaker opened in Step 2A(1).

3. Relamping

A. Lower Anticollision Light



ZONES 143 AND 144



R R Lower Anticollision Light - Removal and Installation
Figure 401

(1) On EXTERIOR LIGHTS section of eyebrow panel, zone 210, verify that ANTI-COLL switchlight is in off position. (Switchlight will indicate OFF if electrical power is turned on.)

(2) Remove access cover plate on light by loosening captive screws (Ref. Fig. 401).

R CAUTION: TIGHTEN LAMP SCREWS EVENLY.

(3) Remove faulty lamp and install replacement lamp.

(4) Replace cover plate.

(5) Turn on electrical power (Ref. 24-41-00).

(6) Turn on anticollision lights to test lamp. Turn lights off after test.

(7) Turn off electrical power (Ref. 24-41-00).

FORWARD STROBE LIGHT - REMOVAL AND INSTALLATION

1. Referenced Procedure

24-41-00	External Power/Ground Service System - Maintenance Practices
6-40-00	Exterior Access Doors and Removable Panels - Description and Operation

2. Removal/Installation

A. Removal

(1) On Flight Engineer/Second Officers overhead circuit breaker panel CB2, zone 215, open and tag circuit breaker EXTERIOR LIGHTS - STROBE.

(2) Open access door in wingtip lower surface (Ref. Fig. 401).

(3) Disconnect electrical connector from strobe light.

(4) Loosen captive screws on forward inboard side of light mounting tray.

(5) Remove forward holddown adapter from strobe light by removing screws on each adapter.

(6) Remove light by raising forward side to clear tray, then pulling forward to disengage rear holddown pins.

B. Installation

(1) Verify that circuit breaker opened in Step 2A(1) is open and tagged.

(2) Install light by engaging rear holddown pins then pushing aft and down to seat light in mounting tray.

R (3) Install holddown adapter.

R (4) Secure captive screws on forward side of tray.

(5) Connect electrical connector.

(6) Close access door in wingtip lower surface.

(7) Remove tag and close circuit breaker opened in Step 2A(1).

3. Relamping

A. Forward Strobe Light

(1) Remove strobe light from wingtip (Ref. Step 2A).

(2) Remove lens by removing four hex nuts.

WARNING: DO NOT ALLOW FINGERS TO TOUCH FLASHTUBE LAMP. OILS FROM SKIN MAY CAUSE LAMP TO EXPLODE WHEN CURRENT IS APPLIED.

R (3) Before removing flashtube the safety wire must be
R removed.

R (4) Wrap clean, soft cloth around flashtube lamp and pull lamp from housing.

CAUTION: DETERMINE IF THE INSIDE TERMINATIONS OF THE FLASHTUBE ARE OF THE SAME DIAMETER. WHEN INSTALLING A FLASHTUBE WITH INSIDE TERMINATIONS OF DIFFERENT DIAMETERS, THE END OF THE FLASHTUBE WITH THE SMALLEST INSIDE TERMINATION DIAMETER IS TO BE INSTALLED IN THE SOCKET WITH THE ANODE IDENTIFICATION ADJACENT TO IT.

R (5) Install replacement flashtube lamp, using clean, soft cloth to protect lamp.

R (6) Install safety wire on flashtube lamp at each end using
R 0.032 soft brass wire.

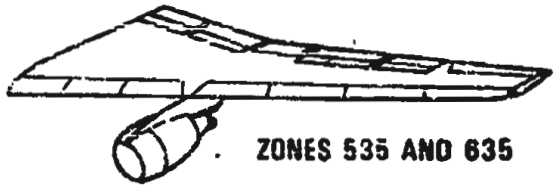
R (7) Reinstall lens.

R (8) Reinstall strobe light in wingtip (Ref. Step 2B).

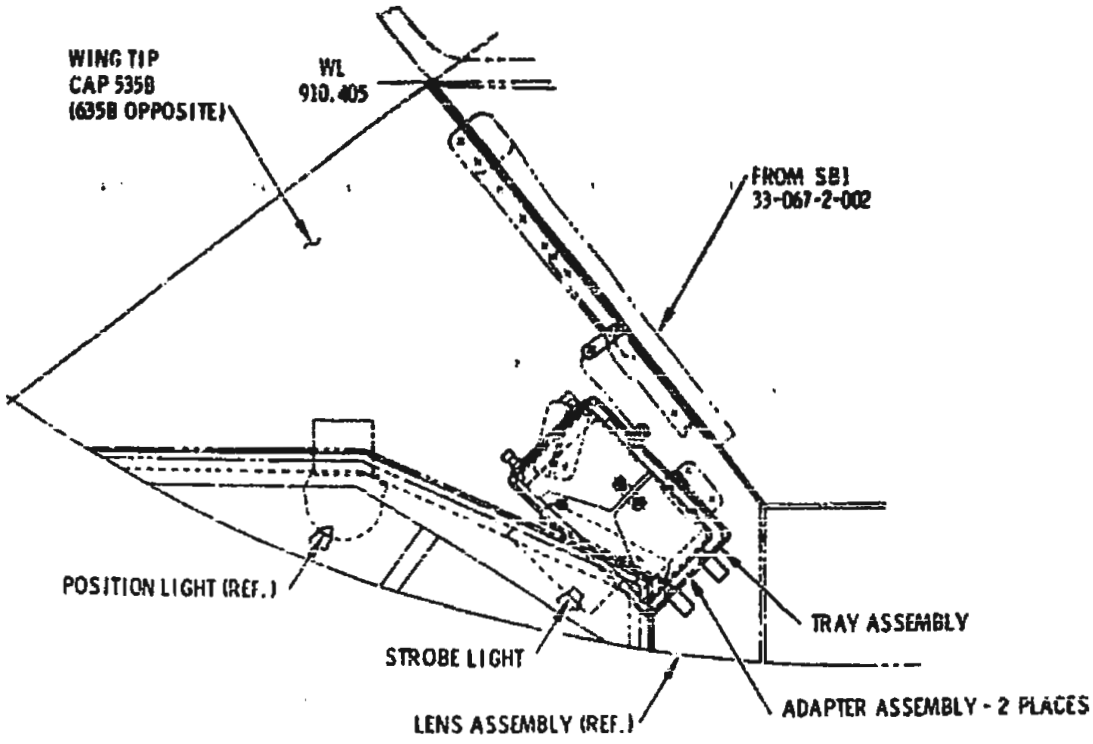
R (9) Turn on electrical power (Ref. 24-41-00).

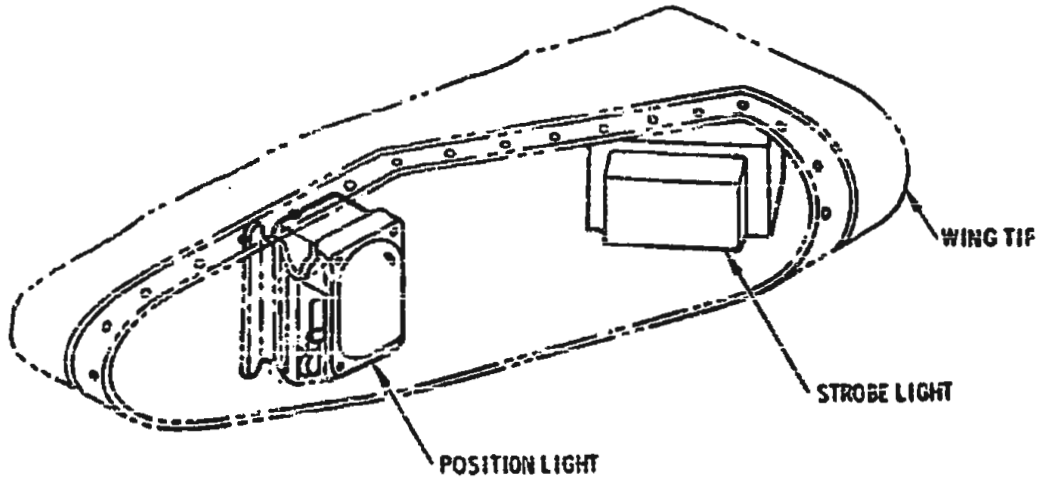
R (10) Turn on strobe lights to test lamp. Turn lights off after test.

R (11) Turn off electrical power (Ref. 24-41-00).



ZONES 535 AND 635





NOTE

LEFT SIDE SHOWN - RIGHT SIDE OPPOSITE

M1-0000-33-1856

R R Forward Strobe Light - Removal and Installation
Figure 401

R R 001B EFFECTIVITY: ALL

STROBE LIGHT FLASHER - REMOVAL AND INSTALLATION

1. Removal/Installation

R A. Removal

R (1) Open and tag FLIGHT STATION MISC, STROBE LT CONT
R circuit breaker (F4) on Flight Engineer/Second Officers
R overhead circuit breaker panel, CB2 zone 215.

R (2) Open ground access doors 192K and 137AZ and enter mid
R electrical service center, (MESC) zone 137.

(3) Disconnect electrical connector from strobe light flasher (Ref. Fig. 401).

(4) Remove hardware securing strobe light flasher and remove strobe light flasher.

B. Installation

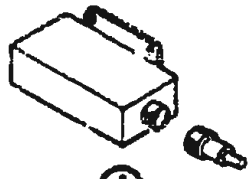
(1) Verify that circuit breaker opened in Step 1A(1) is open.

(2) Install and secure strobe light flasher.

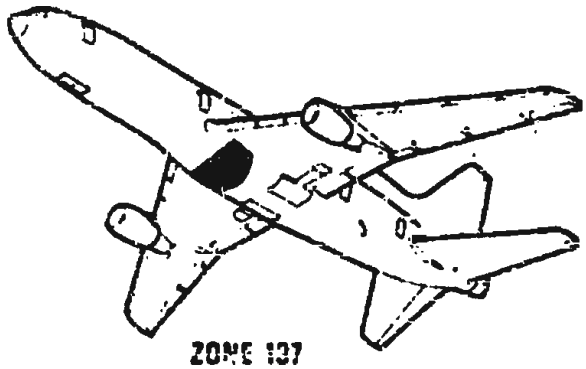
(3) Connect electrical connectors.

(4) Remove tag and close circuit breaker opened in Step
R 1A(1).

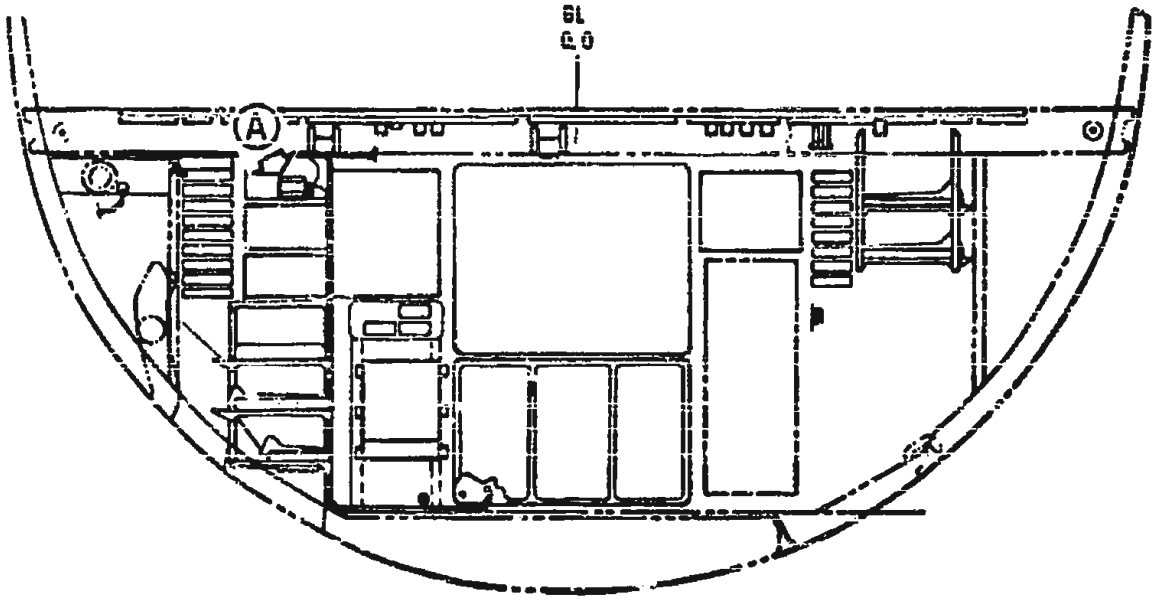
R (5) Close and secure MESC access doors 192K and 137AZ.



STROBE LIGHT
FLASHER AND CONNECTOR



ZONE 137



MESC. FS 943
VIEW LOOKING FORWARD

MI-0001-33-902

Strobe Light Flasher
Figure 401

LANDING AND TAXI LIGHTING - DESCRIPTION AND OPERATION

1. General

The landing and taxi lighting functions are provided by wing landing lights, nosewheel landing and taxi lights, and runway turnoff lights (Ref. Fig. 1).

The wing landing lights are located in the fixed wing structure at the inboard end of inboard slat No. 1, zones 511 and 611.

Two landing/taxi light assemblies are mounted on the nosewheel shock strut sway braces, one on either side of the nose landing gear shock strut, zone 711.

A runway turnoff light is installed in the leading edge of each wing directly above the landing lights. The wing landing lights and runway turnoff lights share a common lens.

2. Operation

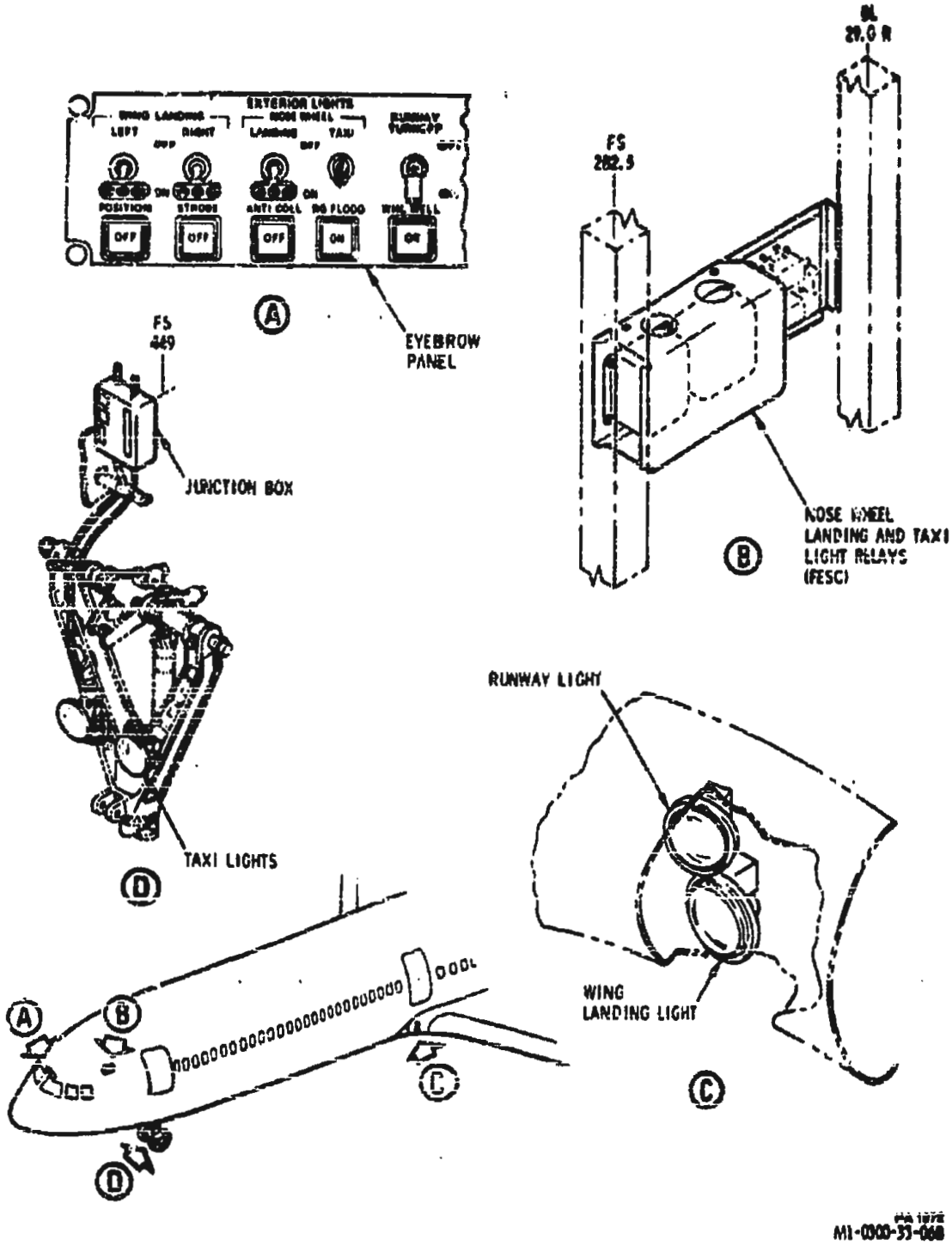
A. Wing Landing Lights

R The ac bus 3 extension (Ref. Fig. 2) supplies 115V ac, 400-Hz, Phase B power through the WING LANDING RH (G10) circuit breaker on the Flight Engineer/Second Officers overhead circuit breaker panel CB2, zone 215, to the RIGHT WING LANDING toggle switch on the EXTERIOR LIGHTS section of the eyebrow panel. The ac bus 2 extension supplies 115V ac,
R 400 Hz, Phase C power through the WING LANDING LH (G9) circuit breaker to the LEFT WING LANDING toggle switch. When the toggle switches are actuated, power is applied to the wing landing lights.

B. Nose Wheel Landing/Taxi Lights

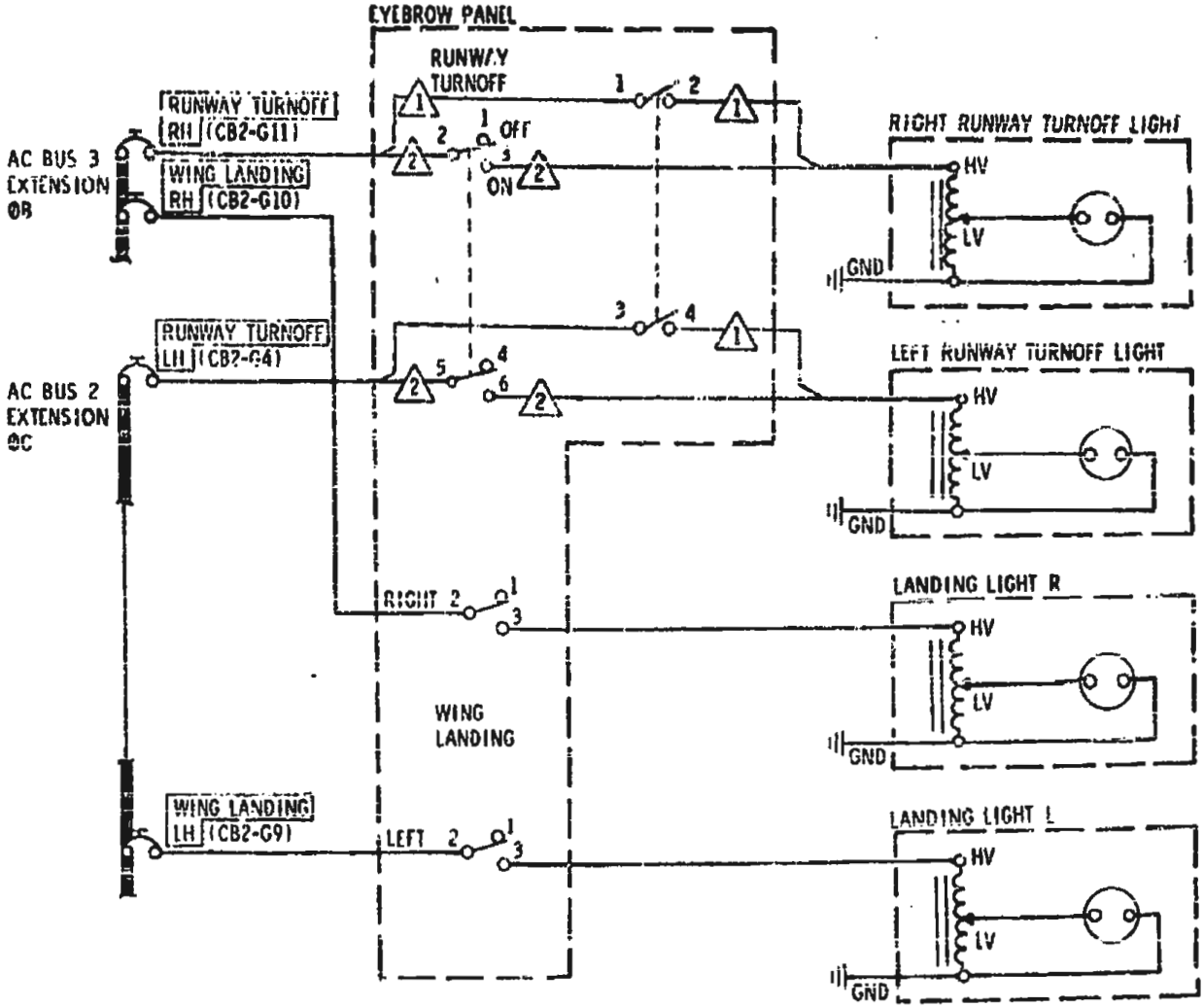
R The dc bus 2 (Ref. Fig. 3) provides 28V dc power through the NOSE GEAR LTS - CONT circuit breaker (G6) on the Flight Engineer/Second Officers aft circuit breaker panel CB3, zone 215 to the proximity switching system in the mid electrical service center, zone 137. The power is interlocked to prevent inadvertently leaving the landing and/or taxi lights on when the nosewheel well door is closed.

From the proximity switching and logic box system, control power is applied to the NOSE WHEEL LANDING and NOSE WHEEL TAXI toggle switches on the EXTERIOR LIGHTS section of the eyebrow panel.



R Landing and Taxi Lights Component Location
R Figure 1

EFFECTIVITY: ALL



NOTE

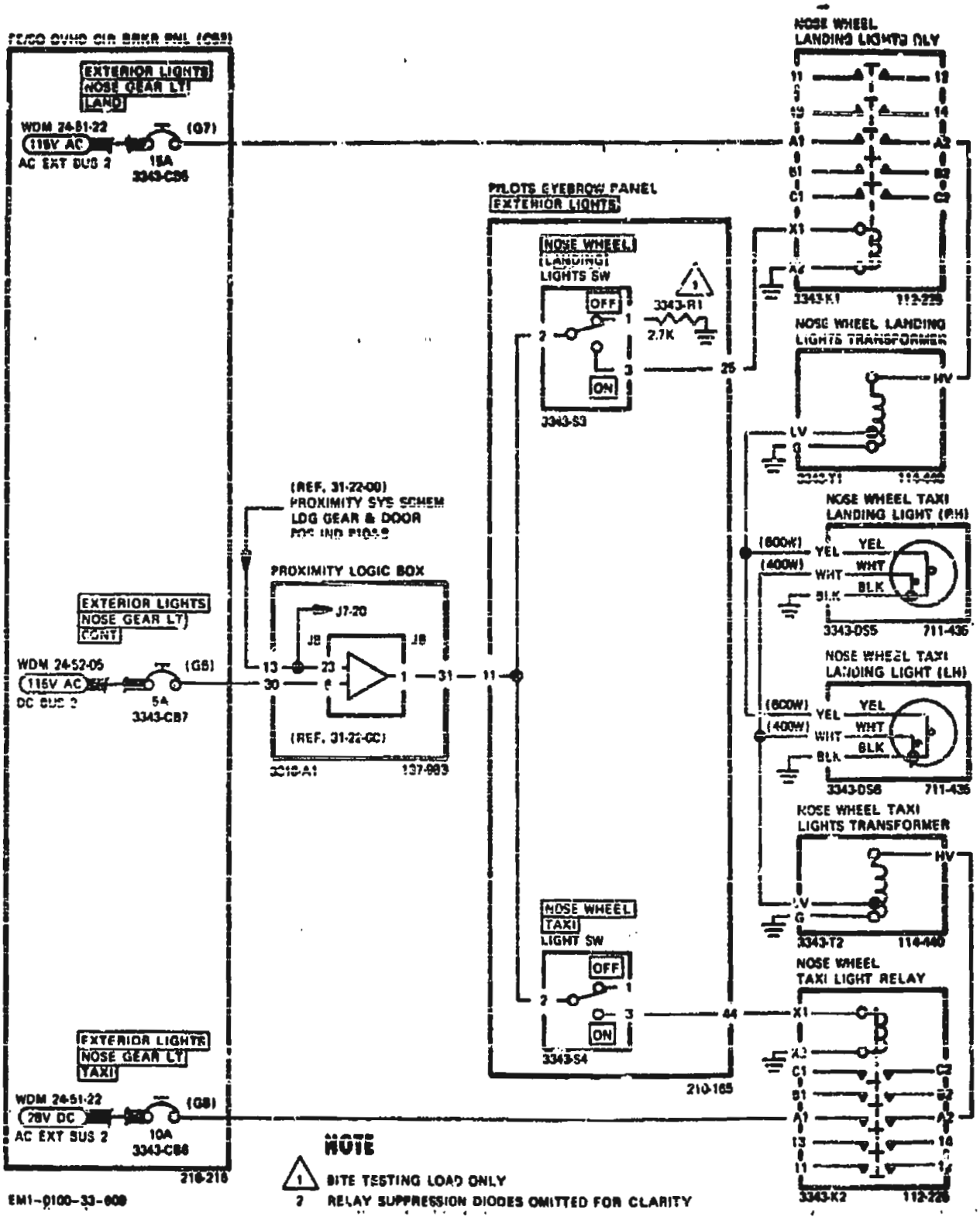
1. AIRCRAFT 001-031 WITH SB 33-066 AND 032-999
2. AIRCRAFT 001-031 WITHOUT SB 33-066

EM1-0000-33-5203

P R Wing Landing and Runway Turnoff Lights Schematic Diagram
Figure 2

EFFECTIVITY: ALL

001B



R R Nose Gear Landing/Taxi Lights Schematic Diagram
Figure 3

When the NOSE WHEEL LANDING toggle switch is set to the ON position, the nosewheel landing lights relay in the forward electronic service center, zone 112 is energized. When the NOSE WHEEL TAXI toggle switch is set to the ON position, the nosewheel taxi lights relay, zone 112, is energized. The ac bus 2 extension supplies 115V ac, 400-Hz, Phase C power through the NOSE GEAR LTS-LAND (G7) circuit breaker on panel CB2, to the nosewheel landing lights relay. When this relay is energized, the 115V ac power is applied to a step-down autotransformer which feeds the nose gear landing light filaments.

The ac bus 2 extension supplies 115V ac, 400-Hz, Phase C power through the NOSE GEAR LTS-TAXI circuit breaker (G8) on panel CB2 to the nosewheel taxi lights relay in zone 112. When the NOSE WHEEL TAXI toggle switch is set on the ON position, power is applied through an autotransformer to the taxi light filaments.

C. Runway Turnoff Lights

The ac bus 3 extension (Ref. Fig. 2) supplies 115V ac, 400-Hz, Phase B power through the RUNWAY TURNOFF RH circuit breaker (G4) on panel CB2, to one set of contacts of the RUNWAY TURNOFF toggle switch. This circuit provides power to the lamp assembly in the right wing fillet only. The ac bus 2 extension supplies 115V ac, 400-Hz, Phase C power through the RUNWAY TURNOFF LH circuit breaker to another set of contacts of the RUNWAY TURNOFF toggle switch on the EXTERIOR LIGHTS section of the eyebrow panel. This second circuit provides power to the lamp assembly in the left wing fillet only. Both sets of toggle switch contacts are ganged so that power is applied to both light circuits simultaneously.

3. Wing Landing Lights

A. Description and Operation

The wing landing lights are fixed in position. The left and right lamp assemblies contain an integral terminal block and step-down autotransformer. The centerline axis of the lamp beams are parallel to the aircraft centerline. This eliminates a dark area when the nose gear light is inoperative. Both wing landing lights use a 600-watt lamp. The autotransformer steps down the supply voltage to 28V ac for the landing light filaments.

4. Runway Turnoff Lights

A. Description and Operation

The runway turnoff light assemblies are the same as the wing landing light assemblies, except that the runway turnoff lights use a different type 600-watt lamp.

5. Nosewheel Landing/Taxi Light

A. Description and Operation

Each nosewheel landing/taxi light assembly contains a two-filament lamp: a 600-watt landing filament and a 400-watt taxi filament. Two autotransformers in the nosewheel well junction box step down the supply voltage to 28V ac for the lamp filaments. One autotransformer feeds the 600-watt landing filament in each of the two lights, and the other feeds the 400-watt taxi filaments.

R # LANDING AND TAXI LIGHTING - FAULT ISOLATION

R 1. General

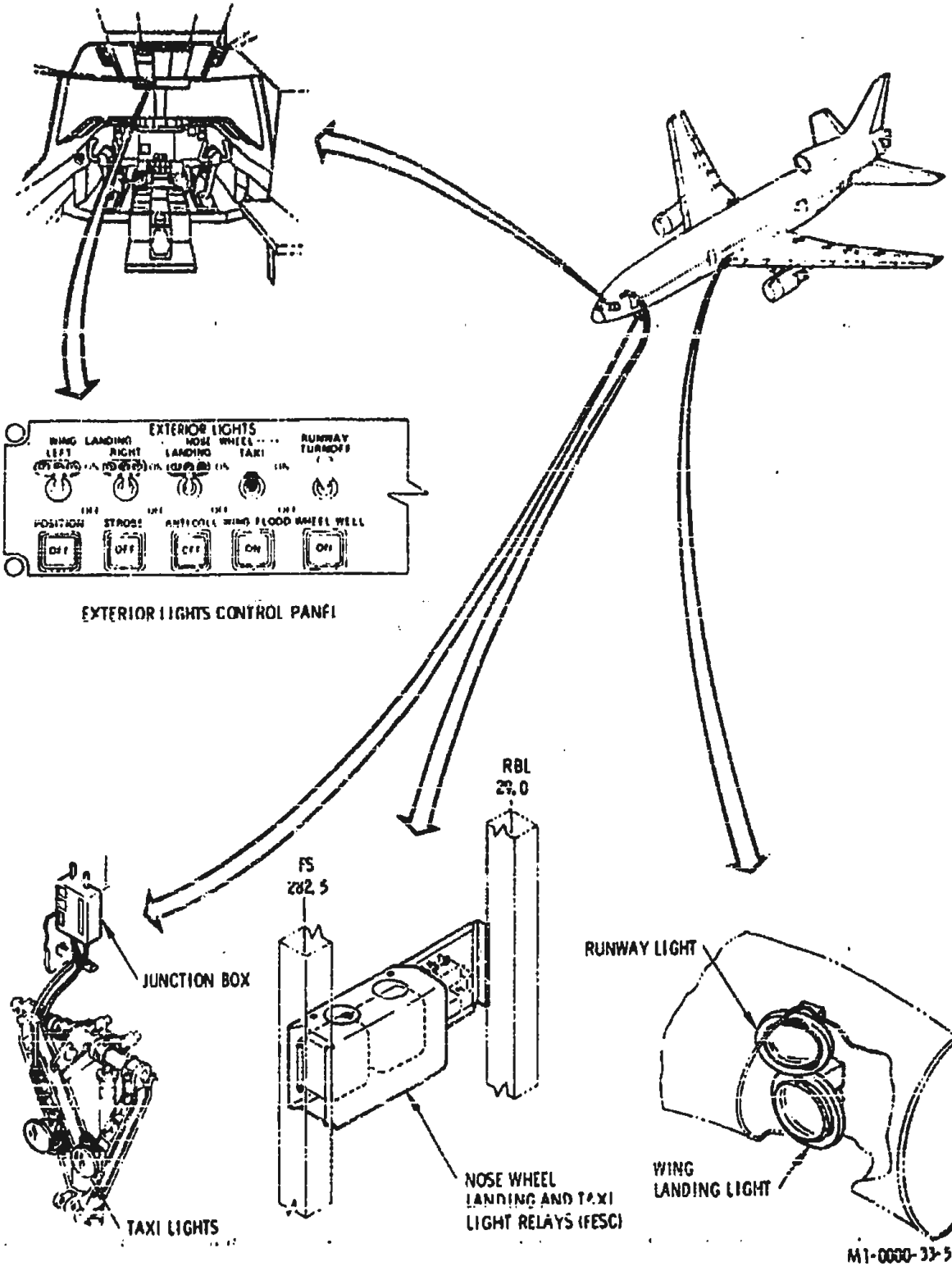
R The electrical schematic in this section can be used for fault
R isolation any time a fault is reported or suspected. Due to the
R relative simplicity of the circuit, no detailed fault isolation
R procedures are provided. Refer to the Maintenance Manual
R Introduction for a detailed discussion of the Fault Isolation
R Reporting Method (FIRM) and use of fault isolation
R diagram/schematics.

R 2. Fault Isolation/Identification

R Table 101 lists the fault isolation diagram and schematics in
R this section.

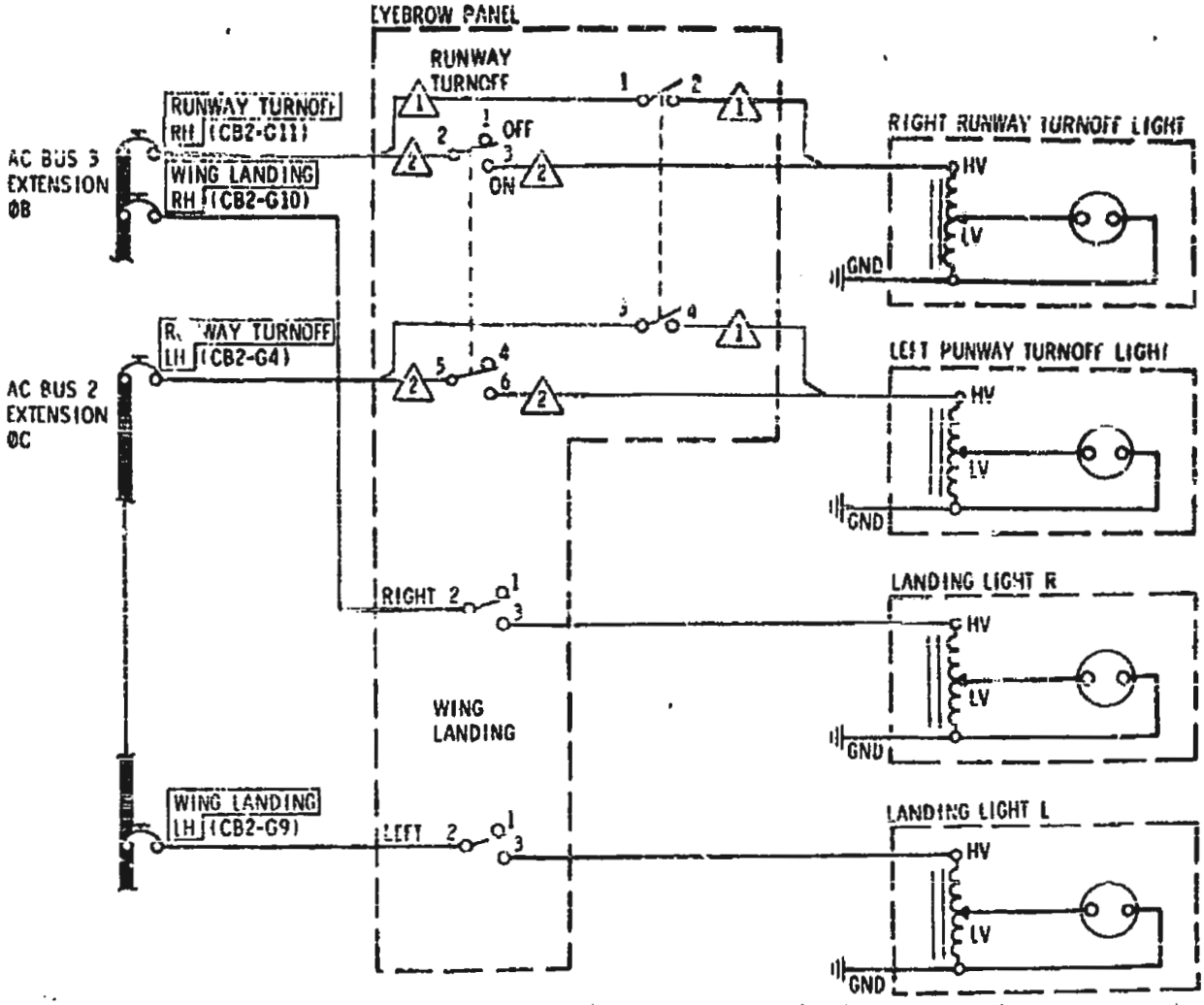
R Table 101

FIGURE	TITLE
101	Component Locator Diagram
SCHEM 1	Wing Landing and Runway Turnoff Lights Schematic
SCHEM 2	Nose Gear Landing/Taxi Lights Schematic



R R Component Locator Diagram
Figure 101

R EFFECTIVITY: ALL
R
001B



NOTE

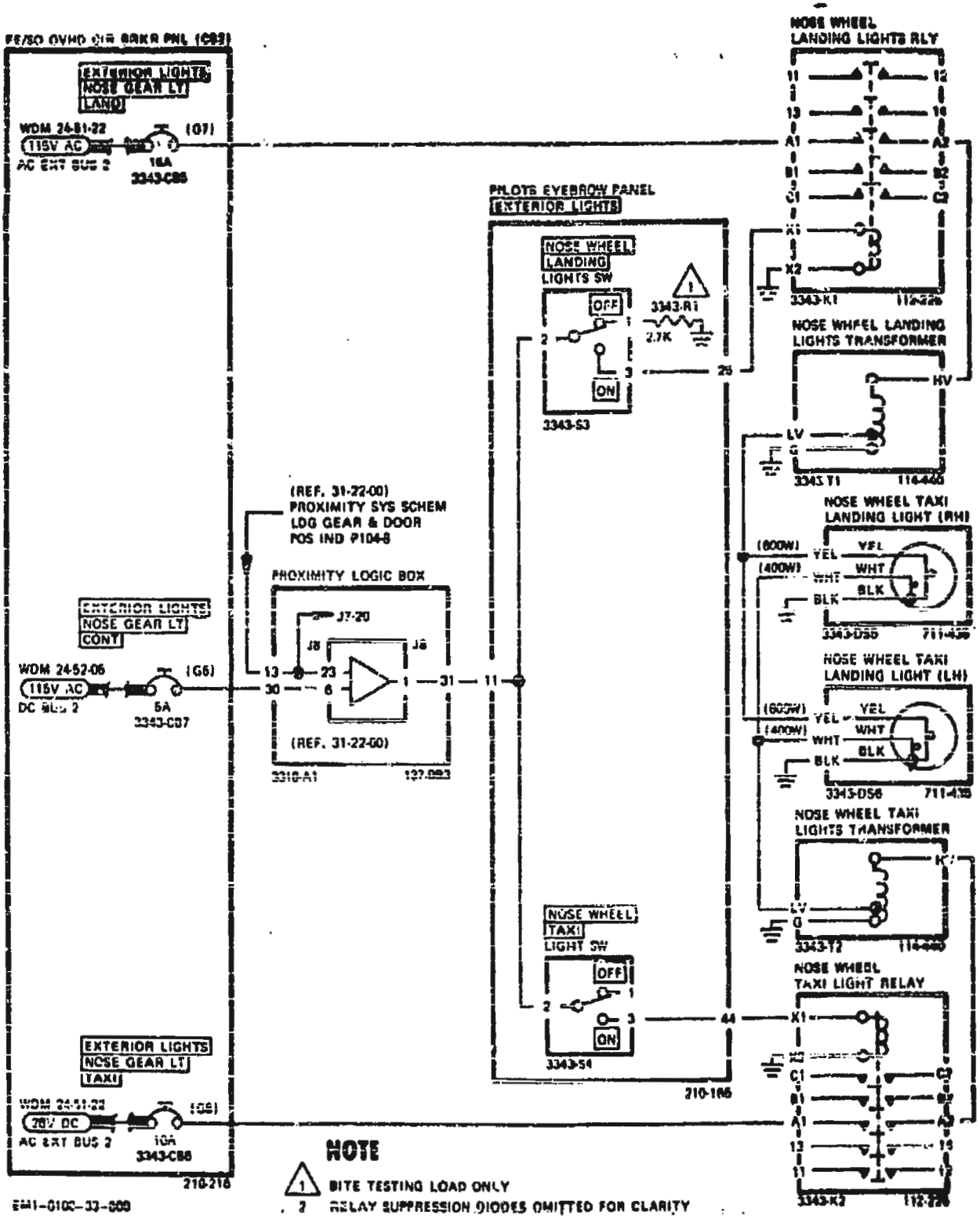
1. AIRCRAFT 001-031 WITH SB 33-066 AND 032-999
2. AIRCRAFT 001-031 WITHOUT SB 33-066

EM1-0000-33-5203

R Wing Landing and Runway Turnoff Lights Schematic
R SCHEM 1

EFFECTIVITY: ALL

001B



EM1-0100-33-000

R Nose Gear Landing/Taxi Lights Schematic
R SCHEM 2

R EFFECTIVITY: ALL
R
001B

LANDING AND TAXI LIGHTING - ADJUSTMENT AND TEST

1. Equipment and Materials

Plumb bobs (2)

Light meter

Targets (3) (Make from 3/4-inch plywood, 4 by 8 feet. Paint dull black.)

2. Referenced Procedures

8-11-00	Leveling, Plumb Bob
24-41-00	External Power/Ground Service System - Maintenance Practices

3. Adjustment/Test

A. Landing Lights Adjustment

(1) Place aircraft on level surface and level in both pitch and roll axis (Ref. 8-11-00).

(2) Locate jig point red dot on lower surface aft of radome at FS 128.86.

(3) Suspend plumb bob on string from jig point to locate point N on level surface (Ref. Fig. 501).

(4) Suspend second plumb bob on string from nose landing gear torsion arm lube fitting to locate point B (reference point for BL 0).

(5) Stretch a chalk line between points N and B (BL 0).

(6) Locate point C at 10.6 feet aft of point N on BL 0.

(7) Using a 15-foot length of string, make an arc from point C on the level surface to locate left and right target points.

(8) Using a 10.6 foot length of string, make an arc from point N to intersect at left and right target points.

(9) Place nose landing light target on point N and 87.3 inches below (vertical) the FS 128.86 jig point (Index point).

(10) Place wing light targets on left and right target points at a height equivalent to 80.7 inches below (vertical) the FS 128.86 jig point (This location is theoretically 32.8 inches vertically above static ground).

(11) Remove screws to open wing landing light lenses.

(12) Turn on electrical power (Ref. 24-41-00).

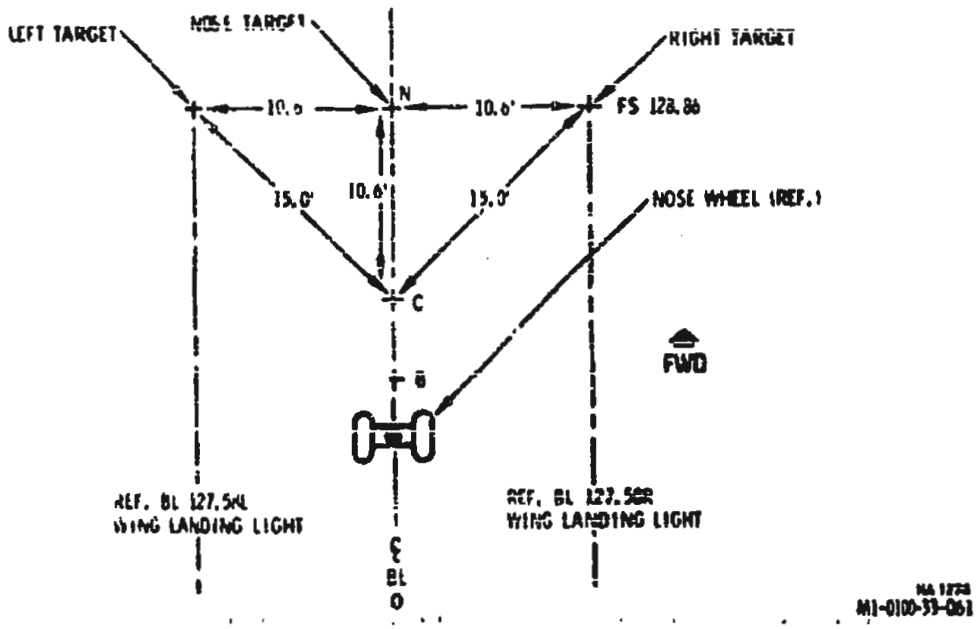
(13) Prepare to operate landing lights during adjustment.

NOTE: Landing light patterns are shown in Fig. 502.

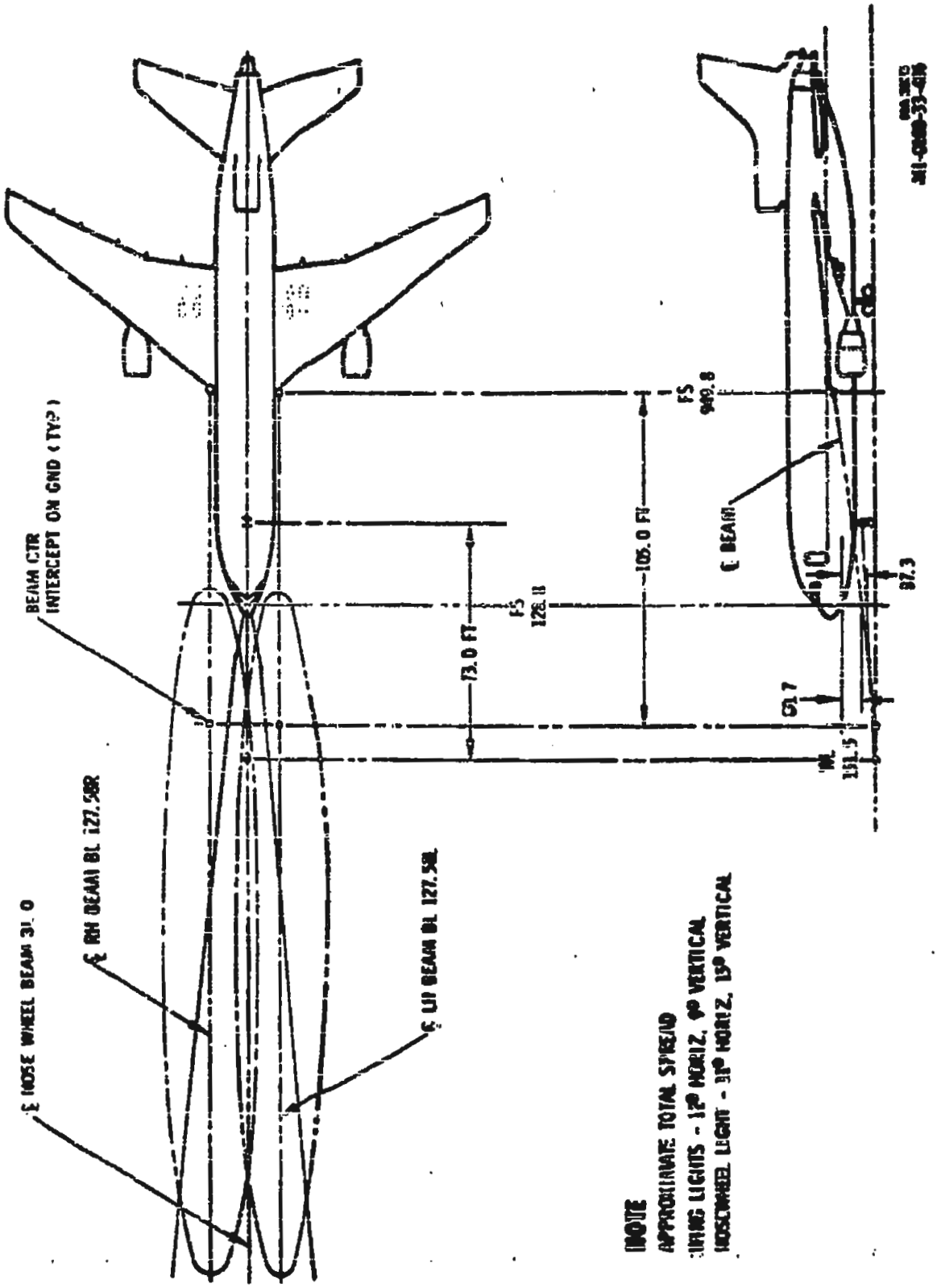
(14) Adjust nose landing lights in vertical plane on target. Light meter may be used to locate maximum light intensity at target. Secure lights.

(15) Adjust left and right wing landing lights to center of target. Light meter may be used to locate maximum light intensity at target. Secure lights and replace lenses.

(16) Turn off electrical power (Ref. 24-41-00).



Landing Lights Aiming Setup for Targets
Figure 501



Landing Light Patterns
Figure 502

WING LANDING LIGHT - REMOVAL AND INSTALLATION

1. Referenced Procedures

24-41-00 External Power/Ground Service System - Maintenance Practices

33-43-00 Landing and Taxi Lighting - Adjustment and Test

2. Removal/Installation

A. Removal

(1) On Flight Engineer/Second Officers overhead circuit breaker panel CB2, zone 215, open and tag circuit
R breaker EXTERIOR LIGHTS - WING LANDING - LH (G9) or RH
R (G10), as applicable.

(2) Remove screws securing lens to wing leading edge and swing lens down.

(3) Disconnect and tag electrical leads at terminals on rear of light.

(4) Remove lamp retainer by loosening screws.

(5) Pull lamp from housing; disconnect and tag wires.

(6) Remove bolts which secure landing light to structure.

NOTE: Do not disturb aiming adjustment if light is to be reinstalled.

(7) Remove landing light.

B. Installation

(1) Verify that circuit breaker opened in Step 2A(1) is open and tagged.

(2) Prepare landing light for installation by removing lamp retainer and lamp [Ref. Steps 2A(4) and 2A(5].

(3) Set light in position and install bolts.

(4) Connect wires to light terminals.

(5) Install lamp and lamp retainer.

(6) Check light aiming adjustment (Ref. 33-43-00).

(7) Close lens and install screws.

(8) Remove tag and close circuit breaker opened in Step 2A(1).

3. Relamping

A. Wing Landing Light

(1) On Flight Engineer/Second Officers overhead circuit breaker panel CB2, zone 215, open and tag circuit breaker EXTERIOR LIGHTS - WING LANDING - LH or RH, as applicable.

(2) Remove lens retaining screws and swing lens down.

(3) Remove lamp retainer by loosening screws.

(4) Remove faulty lamp from light housing; disconnect wires and connect to replacement lamp.

(5) Install replacement lamp in light housing.

R
R NOTE: Lamp trademark must be in upright position (normal reading position).

(6) Install lamp retainer by tightening screws.

(7) Turn on electrical power (Ref. 24-41-00).

(8) Remove tag and close circuit breaker opened in Step 3A(1).

(9) Turn landing light on to test lamp. Turn light off after test.

(10) Turn off electrical power (Ref. 24-41-00).

(11) Close landing light lens and install screws.

NOSE GEAR LANDING/TAXI LIGHT - REMOVAL AND INSTALLATION

1. Referenced Procedures

24-41-00 External Power/Ground Service System - Maintenance Practices

33-43-00 Landing and Taxi Lighting - Adjustment and Test

2. Removal/Installation

A. Removal

(1) On Flight Engineer/Second Officers overhead circuit breaker panel CB2, zone 215, open and tag three circuit breakers EXTERIOR LIGHTS - NOSE GEAR LT (G6), (G7), (G8).

(2) Remove screw from lamp retaining ring; spread ring and remove from light.

(3) Pull lamp from light housing; disconnect and tag wires.

(4) Remove terminal block cover by removing nut and washers.

(5) Disconnect and tag wires on terminal block.

(6) Loosen conduit nut; pull conduit and wires clear of light.

(7) Note aiming adjustment of light, then remove mounting bolts and remove light.

B. Installation

(1) Verify that circuit breakers opened in Step 2A(1) are open and tagged.

(2) Prepare replacement light for installation by removing lamp retainer, lamp, and terminal block cover [Ref. Steps 2A(2), 2A(3), and 2A(4)].

(3) Set light in mounting position and secure with bolts.

(4) Feed wires through conduit fitting, set conduit in position, and tighten conduit nut.

(5) Connect wires to terminal block.

(6) Install cover on terminal block.

(7) Connect wires to lamp terminals.

(8) Set lamp in position and install lamp retainer.

(9) Check light aiming adjustment (Ref. 33-43-00).

(10) Remove tags and close circuit breakers opened in Step 2A(1).

3. Relamping

A. Nose Gear Landing/Taxi Light

(1) On Flight Engineer/Second Officers overhead circuit breaker panel C82, zone 215, open and tag three circuit
R breakers EXTERIOR LIGHTS - NOSE GEAR LT (G6), (G7),
R (G8).

(2) Remove screw from lamp retaining ring; spread ring and remove from light.

(3) Pull lamp from light housing; disconnect wires and connect to replacement lamp.

(4) Set lamp in position and install lamp retainer.

NOTE: Correct installation is with GE trademark inverted. Install with locating lug on lamp adjacent to white terminal in locating housing keyway. See instruction plate on light assembly.

(5) Turn on electrical power (Ref. 24-41-00).

(6) Remove tags and close circuit breakers opened in Step 3A(1).

(7) Turn NOSE WHEEL - LANDING and TAXI lights on to test lamp. Turn lights off after test.

(8) Turn off electrical power (Ref. 24-41-00).

RUNWAY TURNOFF LIGHT - REMOVAL AND INSTALLATION

1. Referenced Procedure

24-41-00 External Power/Ground Service System - Maintenance Practices

2. Removal/Installation

A. Removal

(1) On Flight Engineer/Second Officers overhead circuit breaker panel CB2, zone 215, open and tag circuit breaker EXTERIOR LIGHTS - RUNWAY TURNOFF - LH or RH, as
R applicable.

(2) Remove screws securing lens to wing leading edge and swing lens down.

(3) Disconnect and tag electrical leads at terminals on rear of light.

(4) Remove lamp retainer by loosening screws.

(5) Pull lamp from housing; disconnect and tag wires.

(6) Remove bolts which secure runway turnoff light to structure.

(7) Remove light.

B. Installation

(1) Verify that circuit breaker opened in Step 2A(1) is open and tagged.

(2) Prepare runway turnoff light for installation by removing lamp retainer and lamp [Ref. Steps 2A(4) and 2A(5)].

(3) Set light in position and install bolts.

(4) Connect wires to light terminals.

(5) Install lamp and lamp retainer.

NOTE: Runway turnoff light is not adjustable.

(6) Close lens and install screws.

NOTE: Visually check for minimum clearance of 0.250 inch between the lens retainer and adjacent structure. If required, the upper portion of the retainer may be trimmed as shown in Figure 401 to obtain minimum clearance.

(7) Remove tag and close circuit breaker opened in Step 2A(1).

3. Relamping

A. Runway Turnoff Light

(1) On Flight Engineer/Second Officers overhead circuit breaker panel CB2, zone 215, open and tag circuit breaker EXTERIOR LIGHTS - RUNWAY TURNOFF - LH or RH, as applicable.

(2) Remove screws securing lens to wing leading edge and swing lens down.

(3) Remove lamp retainer by loosening screws.

(4) Remove faulty lamp from light housing; disconnect wires and connect to replacement lamp.

(5) Install replacement lamp in light housing.

(6) Install lamp retainer by tightening screws.

(7) Turn on electrical power (Ref. 24-41-00).

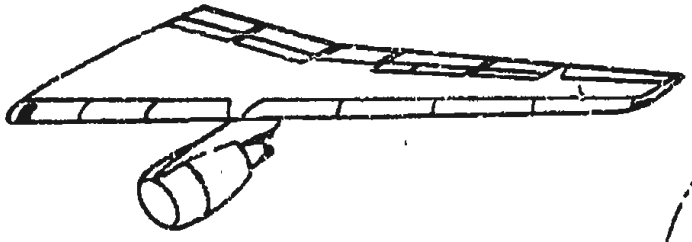
(8) Remove tag and close circuit breaker opened in Step 3A(1).

(9) Turn runway turnoff light on to test lamp. Turn light off after test.

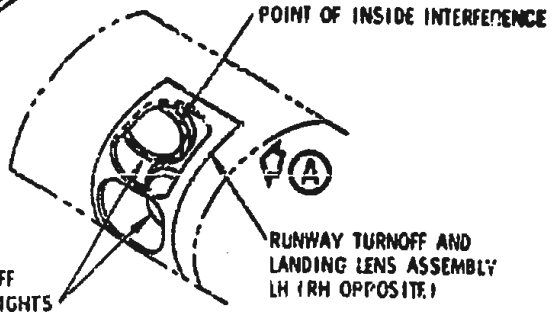
(10) Turn off electrical power (Ref. 24-41-00).

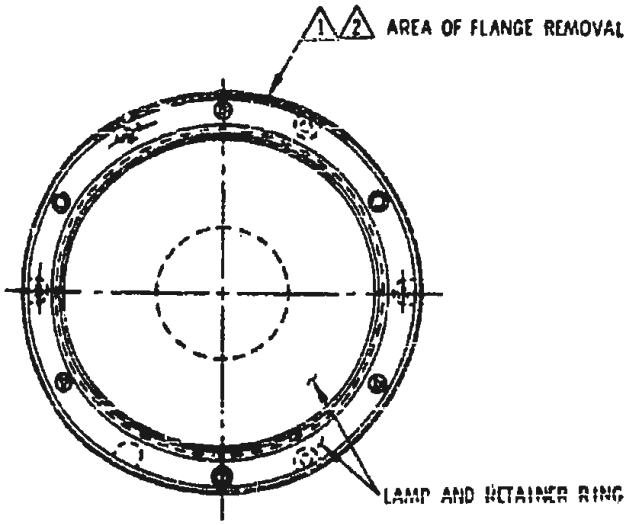
(11) Close landing light lens and install screws.

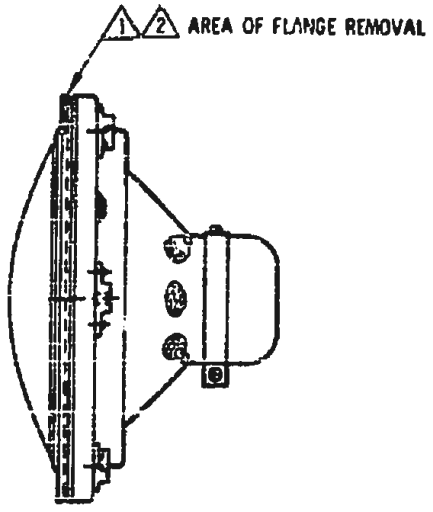
NOTE: Visually check for minimum clearance of 0.250 inch between the lens retainer and adjacent structure. If required, the upper portion of the retainer may be trimmed as shown in Figure 401 to obtain minimum clearance.



ZONE 510 AND 610


POINT OF INSIDE INTERFERENCE
A
RUNWAY TURNOFF AND LANDING LENS ASSEMBLY LH (RH OPPOSITE)
RUNWAY TURNOFF AND LANDING LIGHTS





RUNWAY TURNOFF LIGHT
(LENS ASSEMBLY AND LOWER LANDING LIGHT NOT SHOWN)

NOTE

1. TRIM UPPER POSITION OF RETAINER FLANGE TO OBTAIN CLEARANCE OF 0.250 INCH MINIMUM BETWEEN FLANGE AND STRUCTURE.
2. TRIMMING IS NOT REQUIRED ON AIRCRAFT WITH SB093-33-034 INCORPORATED

M1-0101-33-625

R R Runway Turn-off Lights Maintenance Information
Figure 401

POSITION LIGHTING - DESCRIPTION AND OPERATION

1. General

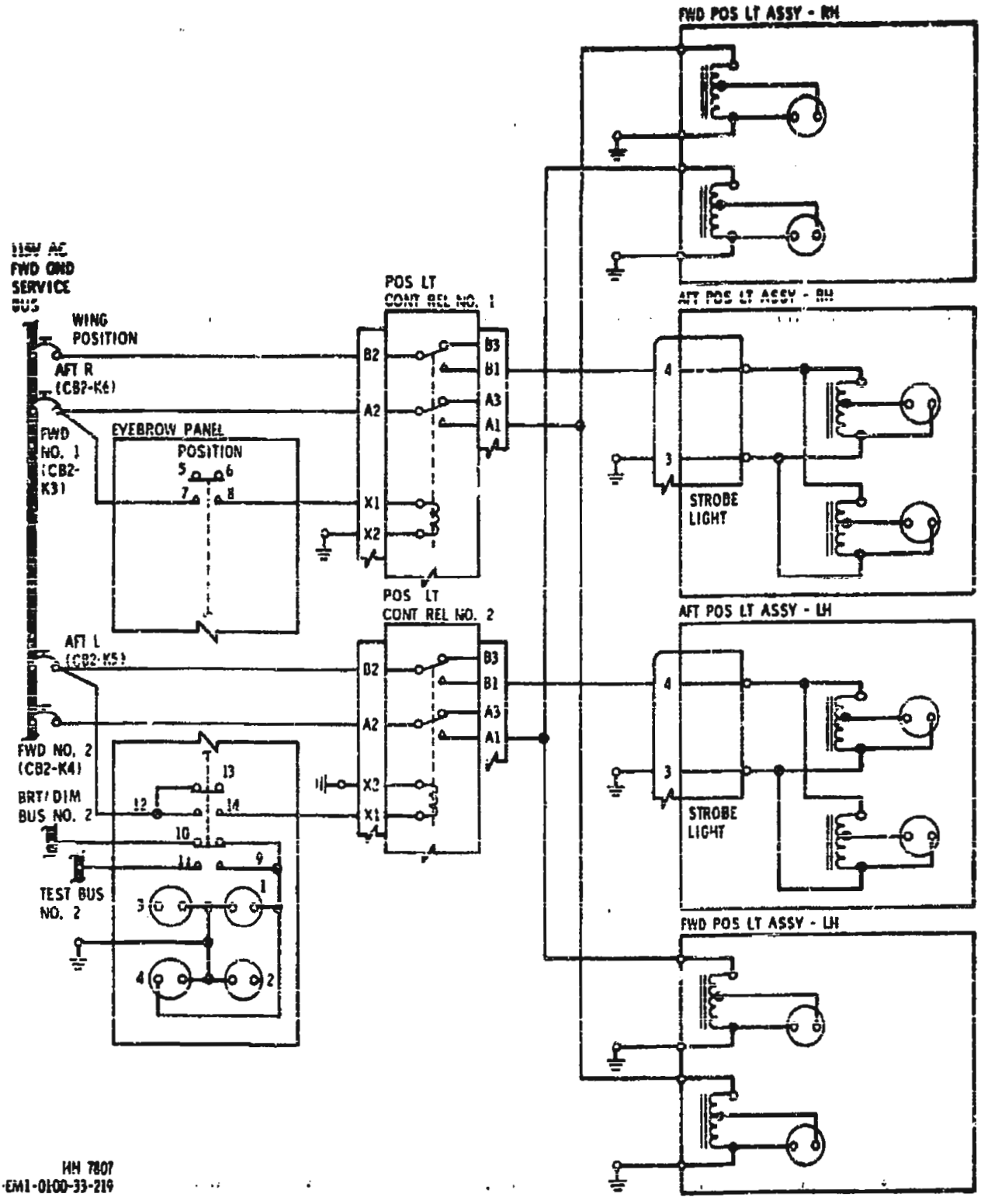
Forward and aft navigational position lights are mounted in the wingtips, zones 535 and 635. The forward position lights are located forward and inboard of the forward strobe lights. The aft position light is combined with the aft strobe light to form one complete unit.

2. Position Lights

A. Description and Operaton

Each position light assembly contains two transformers, two reflectors, and two 100-watt quartz lamps. The transformers step down the supply voltage to 10V ac for application to the lamps. The forward ground service bus (Ref. Fig. 1) provides 115V ac, 400-Hz, Phase A power through the WING POSITION FWD NO. 1 (K3), WING POSITION FWD NO. 2 (K4), WING POSITION AFT L (K5), and WING POSITION AFT R (K6) circuit breakers on circuit breaker panel CB2, zone 215, to two position light control relays. The OFF legend of the POSITION switchlight is on when the position lights are not in use. When the POSITION switchlight is actuated, the OFF legend goes out and the two position light control relays in the forward electronics service center (FESC), zone 112 are energized via the switchlight. These relays switch electrical power to turn on the position lights.

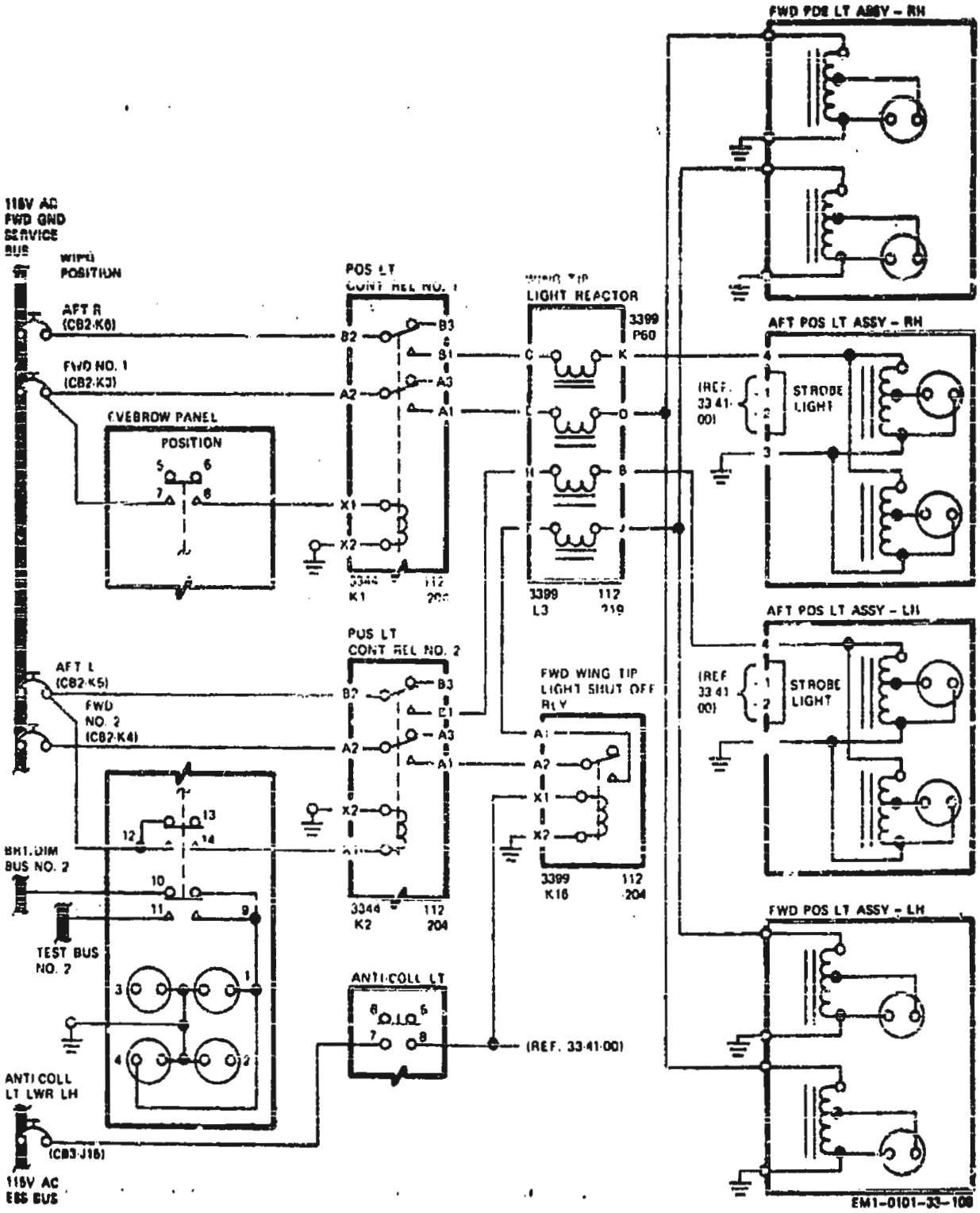
R NOTE: On aircraft that have SB33-064 accomplished of the two-lamps in the forward position lights is also controlled by the anti-collision lights switch and will go off when the anti-collision light is turned off. See Figure 1.



R Position Lights Schematic
R Figure 1

EFFECTIVITY: 001-031 WITHOUT SB33-064

001B


FWD POS LT ASSY - RH
AFT POS LT ASSY - RH
AFT POS LT ASSY - LH
FWD POS LT ASSY - LH
115V AC FWD GND SERVICE BUS
WIPER POSITION
AFT R (CB2-K6)
FWD NO. 1 (CB2-K3)
EYEBROW PANEL POSITION
POS LT CONT REL NO. 1
LIGHT REACTOR
3399 P60
STROBE LIGHT
AFT L (CB2-K5)
FWD NO. 2 (CB2-K4)
POS LT CONT REL NO. 2
FWD WING TIP LIGHT SHUT OFF RLY
BRT DIM BUS NO. 2
TEST BUS NO. 2
ANTI COLL LT
ANTI COLL LT LWR LH
(CB3-J16)
115V AC EBS BUS
(REF. 33-41-00)
EM1-0101-33-108

R
R

Position Lights Schematic
Figure 1

EFFECTIVITY: 001-031 WITH SB33-064 and 032-999

001B

R

WING POSITION LIGHTING - FAULT ISOLATION

R 1. General

R The diagrams and schematics in this section can be used for
R fault isolation any time a fault is reported or suspected. The
R PREREQUISITES listed at the top of each fault isolation diagram
R must be satisfied prior to starting fault isolation. Uncommon
R abbreviations are defined on the using fault code diagram or
R schematic.

R If the flight crew reports a trouble using a fault code number,
R the code number can be found in the Fault Isolation Reference
R Table in the Chapter 33 Fault Code Index. The index specifies
R the exact maintenance manual section, fault isolation diagram,
R and block number on the diagram where the fault isolation
R procedure should start. Schematics are included at the end of
R the section to supplement the fault code diagrams or as an aid
R in isolating a problem not covered on the diagrams.

R Refer to the Maintenance Manual Introduction for a more detailed
R discussion of the Fault Isolation Reporting Method (FIPM) and
R use of fault isolation diagrams/schematics.

R 2. Fault Isolation

R A. Position Lights (Reference SCHEM 1)

R (1) A short circuit in one of the dual L.H. or R.H. FWD
R POSITION lights will result in loss of electrical power
R to the R.H. AFT POSITION lights. This is because of
R the resulting open circuit breaker that supplies power
R to the POSITION LIGHTS CONTROL RELAY NO. 1 coil.

R (2) If both lamps in the R.H. AFT POSITION lights are not
R lit, and one each of the dual L.H. and R.H. FWD
R POSITION lights are not lit, and the "WING POSITION-FWD
R NO. 1" circuit breaker on the Second Officer's Forward
R Overhead (P9) circuit breaker panel (position K3) is
R open, look for a short circuit in either the L.H. or
R R.H. FWD POSITION light. Look for a bent tab at the
R ends of the lamp holder shorting to the cover.

R (3) A short circuit in either of the dual L.H. AFT POSITION
R lights will result in loss of electrical power to one
R of each of the dual L.H. and R.H. FWD POSITION lights.
R This is because of the resulting open circuit breaker
R that supplies power to the POSITION LIGHTS CONTROL
R RELAY NO. 2 coil.

(4) If both lamps in the L.H. AFT POSITION lights are not lit, and one each of the dual L.H. and R.H. FWD POSITION lights are not lit, and the "WING POSITION-AFT L." circuit breaker on the Second Officer's Forward Overhead (P9) circuit breaker panel (position K5) is open, look for a short circuit in the L.H. AFT POSITION light. Look for a bent tab at the ends of the lamp holder shorting to the cover.

(5) Position light failures other than the multiple failures described above, are probably individual light component failures, and the fault will be found in the light assembly that is not lit.

3. Fault Isolation/Identification

Table 101 lists the fault isolation diagrams and schematics in this section.

TABLE 101

FIGURE	TITLE
101	Component Location Index
102	Component Locator Diagram

COMPONENT	QTY	AREA/ACCESS	REFERENCE
ASSEMBLY – AFT POSITION LIGHT LH	1	LEFT WING TIP, AFT	33-44-03
ASSEMBLY – AFT POSITION LIGHT RH	1	RIGHT WING TIP, AFT	33-44-03
ASSEMBLY – FWD POSITION LIGHT LH	1	LEFT WING TIP, FWD 535CB	33-44-01*
ASSEMBLY – FWD POSITION LIGHT RH	1	RIGHT WING TIP, FWD 535CB	33-44-01
CIRCUIT BREAKERS			
ANTI-COLL LT – LWR LH 3341-CB2	1	FLT STA/CB1 J15	*
WING POSITION LT – AFT LH 3344-CB5	1	FLT STA/CB2 K5	*
WING POSITION LT – AFT RH 3344-CB3	1	FLT STA/CB2 K6	*
WING POSITION LT – FWD NO. 1 3344-CB4	1	FLT STA/CB2 K3	*
WING POSITION LT – FWD NO. 2 3344-CB6	1	FLT STA/CB2 K4	*
REACTOR – FWD WING TIP LIGHT 1	1	FESC, RH FWD RACK/112AB	20-24-01
RELAY – FWD WING TIP LIGHT SHUT OFF 1	1	FESC, RH FWD RACK/112AB	20-24-01
RELAY – POSITION LIGHT CONTROL NO. 1	1	FESC, RH FWD RACK/112AB	20-24-01
RELAY – POSITION LIGHT CONTROL NO. 2	1	FESC, RH FWD RACK/112AB	20-24-01
SWITCHLIGHT – ANTI-COLLISION LIGHTS	1	FLT STA PILOTS EYEBROW PANEL	20-33-01
SWITCHLIGHT – POSITION LIGHTS	1	FLT STA PILOTS EYEBROW PANEL	20-33-01

NOTE

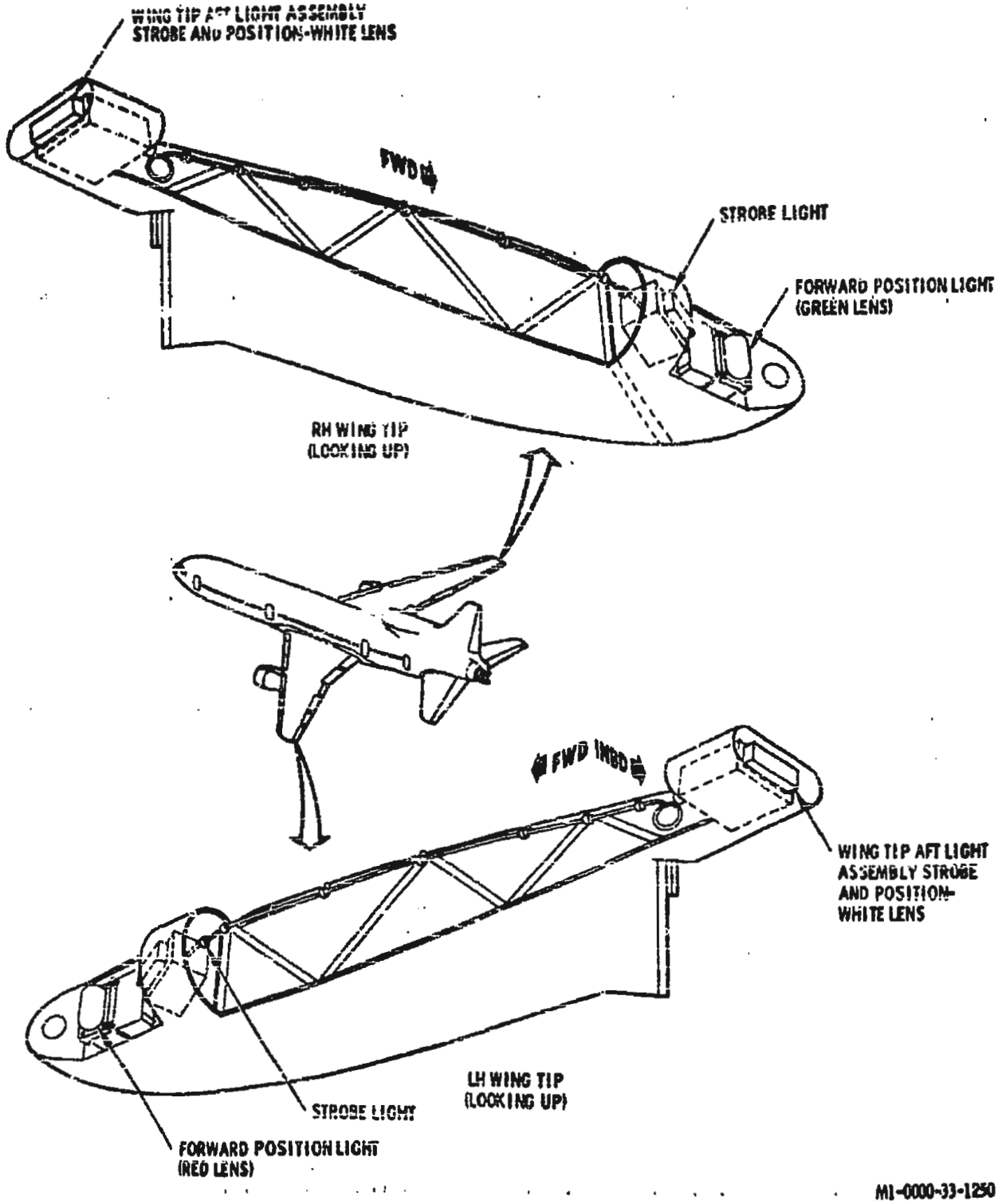
1 ON AIRCRAFT WITH SB 33-064

* SEE WM EQUIPMENT LIST

M1-0000-33-6154

R Component Location Index
R Figure 101

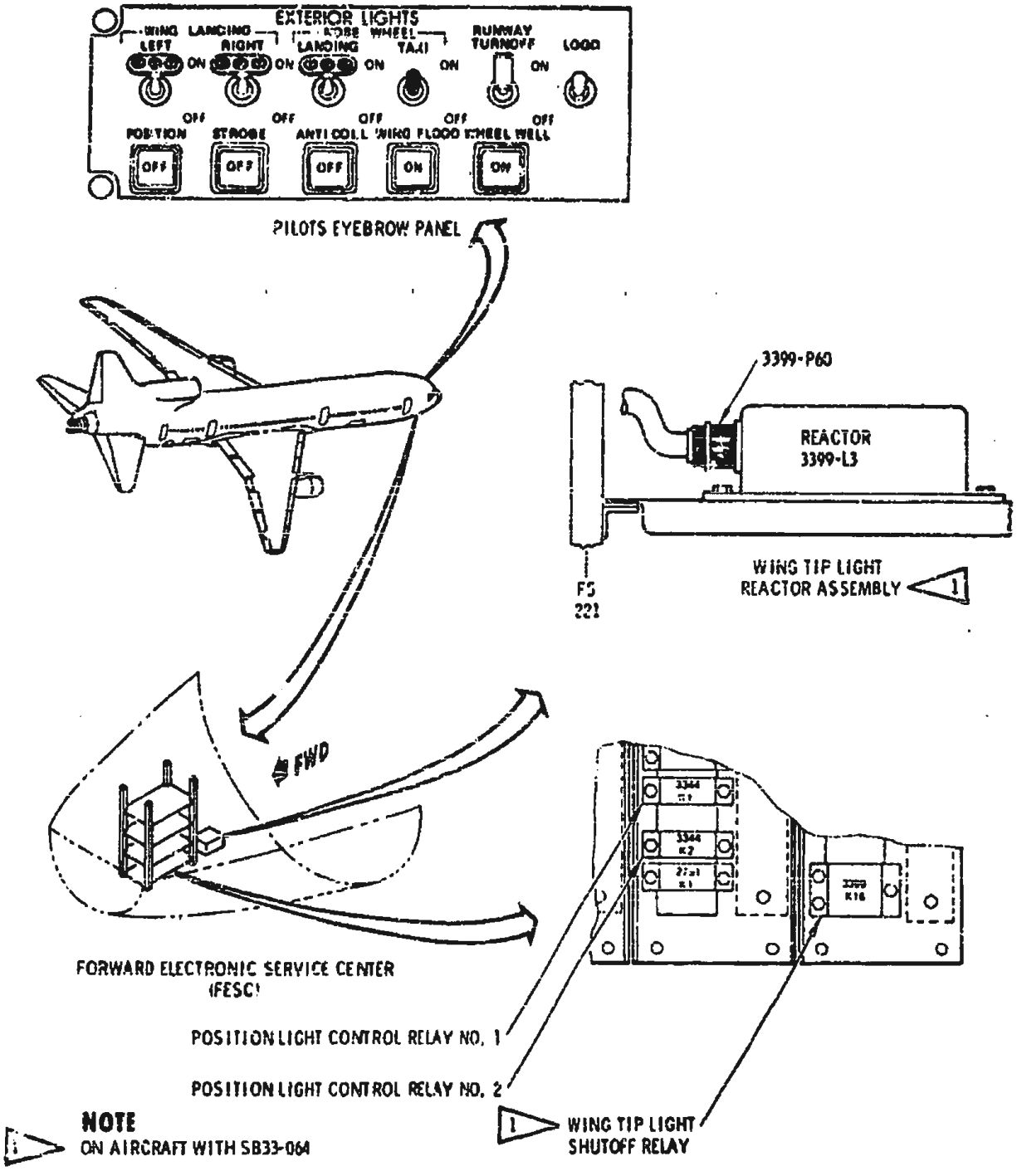
R EFFECTIVITY: ALL
R
001B


WING TIP AFT LIGHT ASSEMBLY STROBE AND POSITION-WHITE LENS
FWD
STROBE LIGHT
FORWARD POSITION LIGHT (GREEN LENS)
RH WING TIP (LOOKING UP)
FWD INBD
WING TIP AFT LIGHT ASSEMBLY STROBE AND POSITION-WHITE LENS
LH WING TIP (LOOKING UP)
STROBE LIGHT
FORWARD POSITION LIGHT (RED LENS)

M1-0000-33-1250

R R Component Locator Diagram
Figure 102 (Sheet 1)

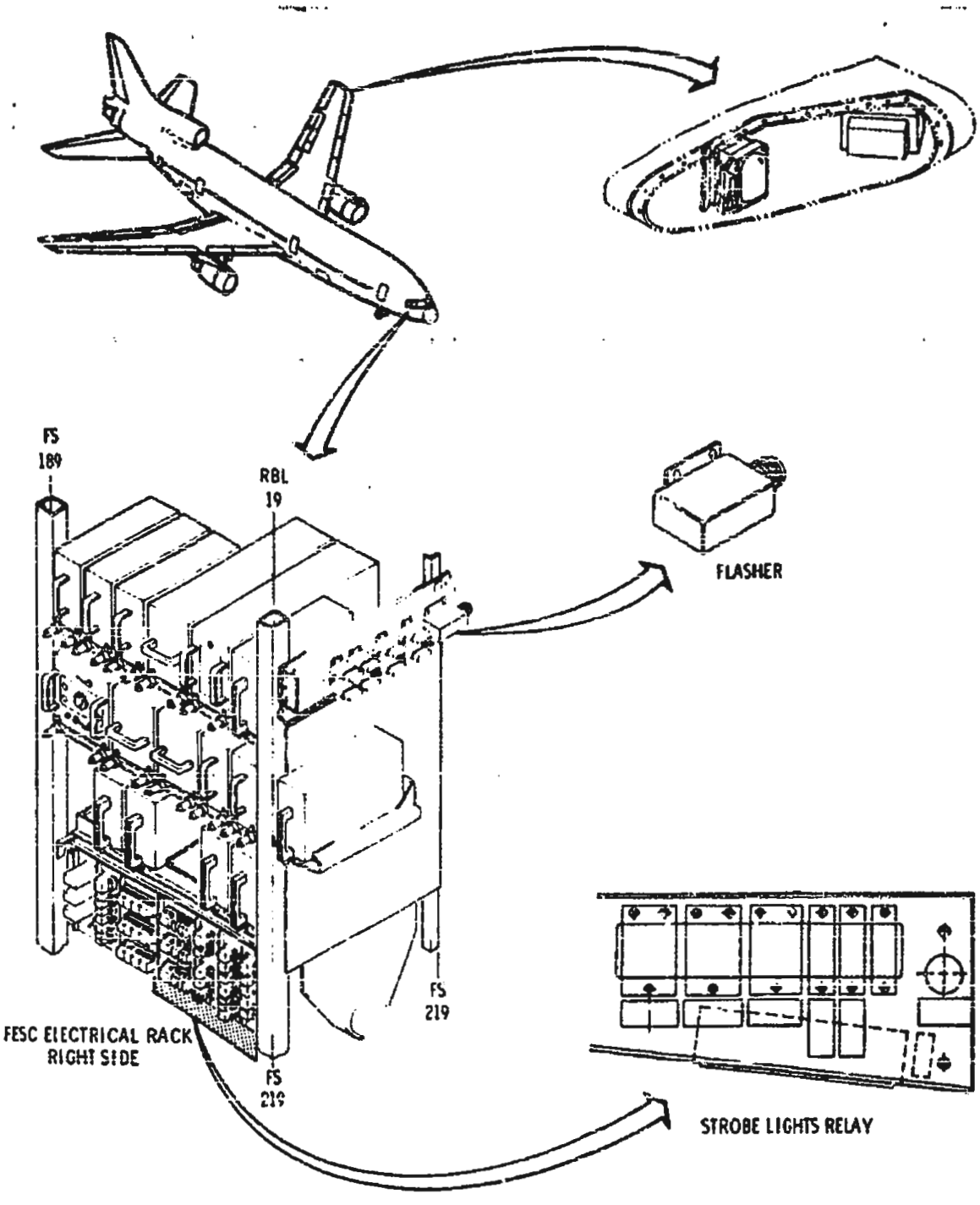
R R 001B EFFECTIVITY: ALL



M1-0000-33-5155

R Component Locator Diagram
R Figure 102 (Sheet 2)

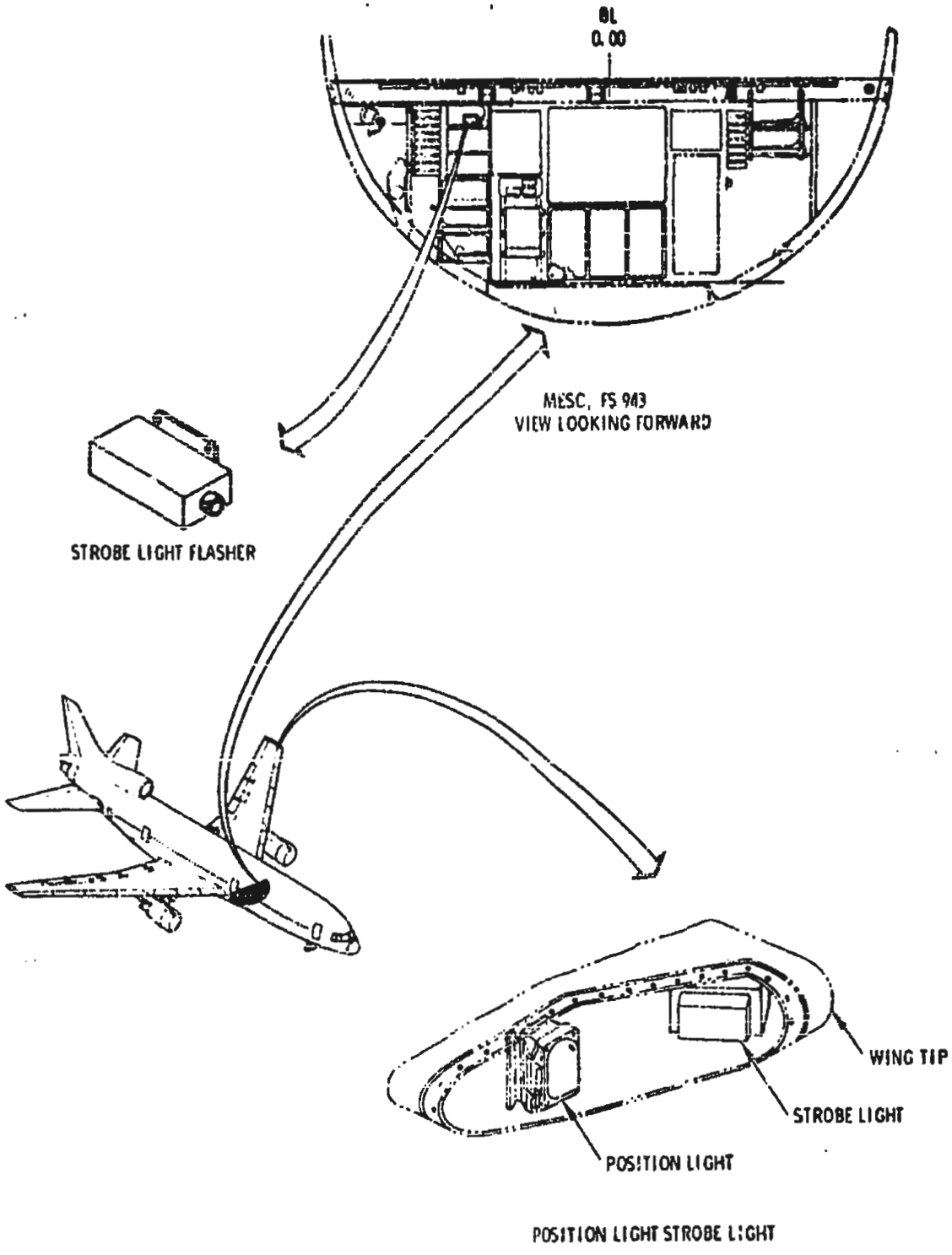
R EFFECTIVITY: ALL
R
001B



M1-0000-33-5150

R
R Componment Locator Diagram
Figure 102 (Sheet 3)

R EFFECTIVITY: WITHOUT SB33-042
R
001E

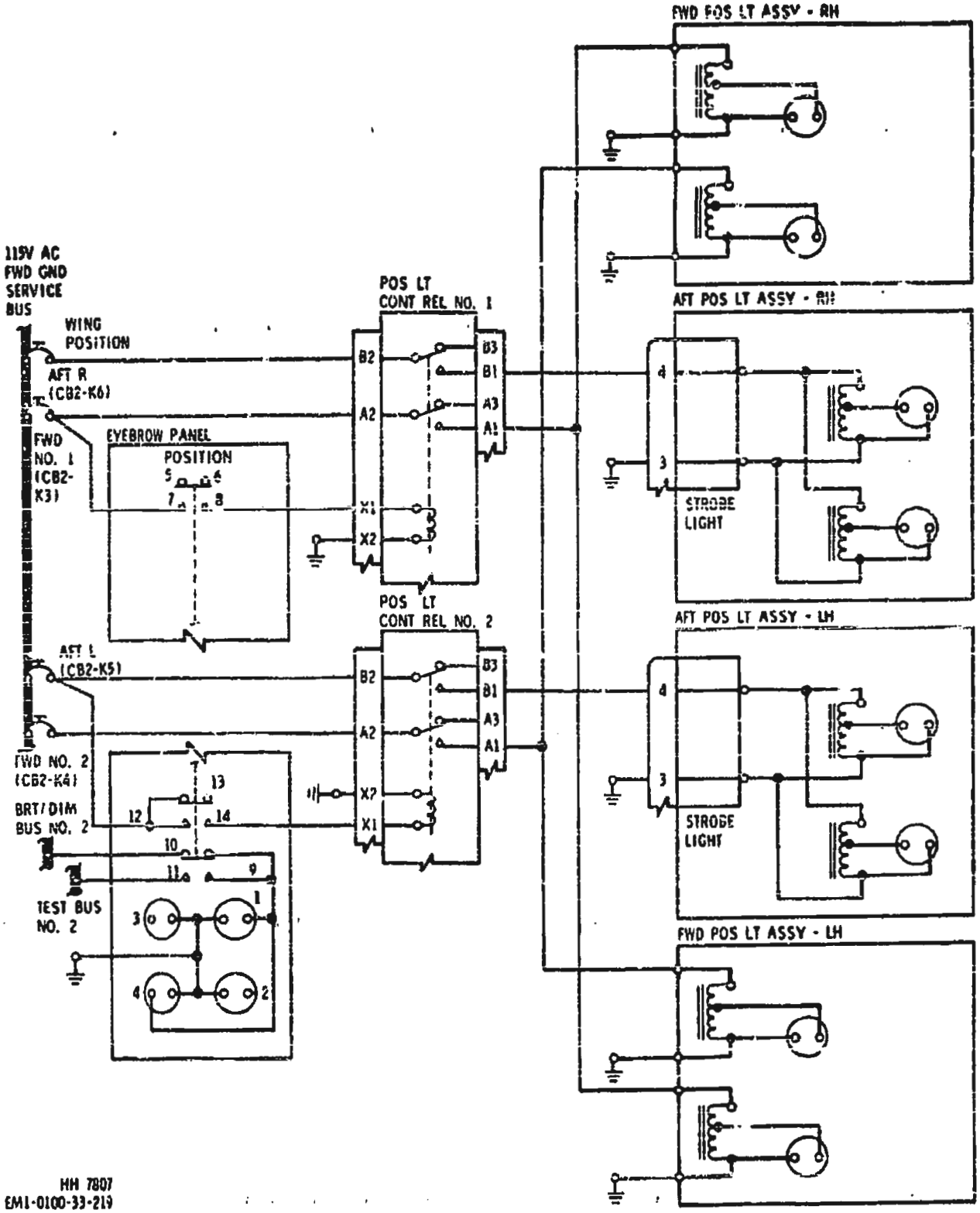


POSITION LIGHT STROBE LIGHT

M1-0000-33-5151

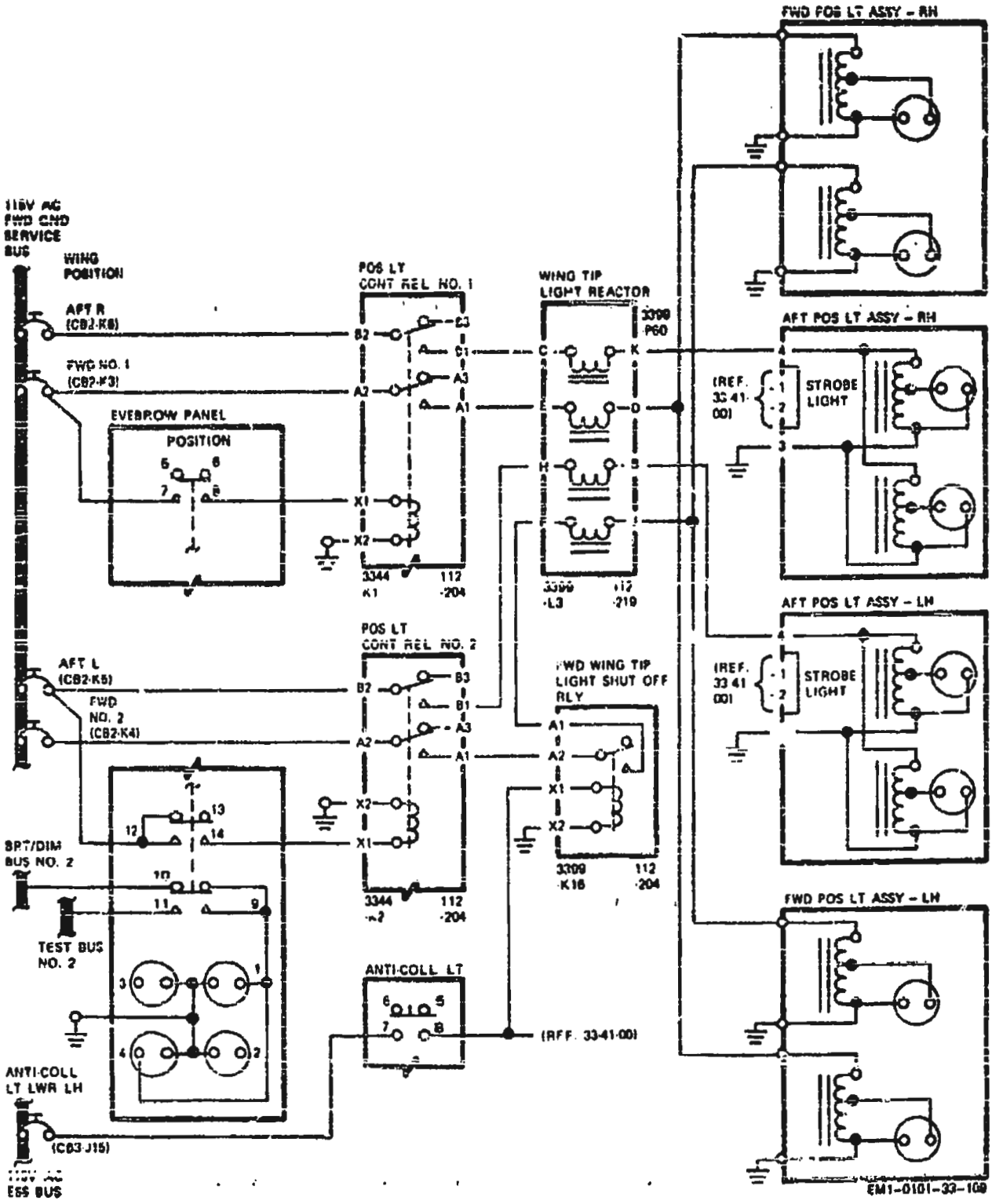
R Component Locator Diagram
R Figure 102 (Sheet 3)

R EFFECTIVITY: WITH SB33-042
R
001B



Position Lights Schematic
SCHEM 1

EFFECTIVITY: WITHOUT SB33-064



Position Lights Schematic
SCHEM 1

EFFECTIVITY: WITH SB33-064

FORWARD POSITION LIGHT - REMOVAL AND INSTALLATION

1. Referenced Procedure

24-41-00 External Power/Ground Service System - Maintenance Practices

2. Removal/Installation

A. Removal

(1) On Flight Engineer/Second Officers overhead circuit breaker panel CB2, zone 215, open and tag 2 GROUND SERVICE BUS circuit breakers EXTERIOR LT - WING
R POSITION - FWD NO. 1 (K3) and NO. 2 (K4).

(2) Open access door in wingtip lower surface.

(3) Disconnect and tag electrical leads at terminal block.

(4) Remove light by removing mounting screws.

B. Installation

(1) Verify that circuit breakers opened in Step 2A(1) are open and tagged.

(2) Set light in position and install mounting screws.

(3) Remove tags and connect electrical leads to terminal block.

(4) Close access door in wingtip lower surface.

(5) Remove tags and close circuit breakers opened in Step 2A(1).

3. Relamping

A. Forward Position Light

R (1) Ensure that circuit breakers are open [Ref. Step
R 2A(1)].

(2) Open access door in wingtip lower surface.

(3) Loosen hex-head screws and swing light base away from lens to expose lamps.

CAUTION: WHEN REPLACING A "FUSE TYPE" HIGH INTENSITY LAMP, USE CAUTION SO AS NOT TO BEND RETAINING TAB AT ENDS OF LAMP HOLDER. IF TAB IS BENT OUTWARD, CLOSING THE UNIT AFTER LAMP REPLACEMENT WILL ALLOW LENS COVER ASSEMBLY TO SHORT OUT ON BENT TAB AND MAKE LIGHT INOPERATIVE ONCE AGAIN.

WARNING: DO NOT ALLOW FINGERS TO TOUCH LAMP. OILS FROM SKIN MAY CAUSE LAMP TO EXPLODE WHEN CURRENT IS APPLIED.

(4) Remove faulty lamp.

(5) Install replacement lamp.

(6) Close light and tighten screws.

(7) Close access door in wingtip lower surface.

R (8) Close circuit breakers opend in Step 2A(1).

R (9) Turn on electrical power (Ref. 24-41-00).

R R (10) Turn on position lights to test lamp. Turn lights off after test.

R (11) Turn off electrical power (Ref. 24-41-00).

R FORWARD POSITION LIGHT LENS - REMOVAL AND INSTALLATION

R 1. Referenced Procedure

R 20-51-04 ENVIRONMENTAL SEALING OF L-1011 AIRPLANE PB 75-425

R 20-51-15 APPLICATION OF ADHESIVES

R 2. Equipment and Materials

R Aluminized Sealing Compound, Aerodynamic Sealing C-40-1279 or
R equivalent.

R Release Agent, RAM 225 or equivalent.

R Aliphatic Naphtha, TYPE II, FED. SPEC. TT-N-95 or equivalent.

R Clean Lint-Free Cloths

R Brush, Nylon Bristle, 1-inch Flat

R Plastic Scraper

R 3. Removal/Installation

R A. Removal

R (1) On EXTERIOR LIGHTS section of eyebrow panel, verify
R that STROBE and POSITION switchlights are in the OFF
R (latched out) position. Tag switches (switchlights
R will indicate OFF if electrical power is on.)

R (2) On wing tip, remove bolts securing forward position
R light lens assembly. Remove lens assembly.

R WARNING: • USE RELEASE AGENT IN WELL VENTILATED AREA. DO
R NOT INHALE VAPOR AND AVOID CONTACT WITH SKIN AND
R EYES.

R • KEEP RELEASE AGENT AWAY FROM HEAT, SPARKS AND
R OPEN FLAME. FAILURE TO COMPLY MAY RESULT IN
R MATERIAL COMBUSTION.

R CAUTION: DO NOT ALLOW RELEASE AGENT TO COME IN CONTACT WITH
R LENS.

R (3) Apply release agent to both lens retainer and mating
R surface. Scrape off old sealant with plastic scraper.

R WARNING: USE NAPHTHA IN WELL VENTILATED AREA. DO NOT
R INHALE VAPOR AND AVOID CONTACT WITH SKIN AND EYES.

R • KEEP NAPHTHA AWAY FROM HEAT, SPARKS, AND OPEN
R FLAME. FAILURE TO COMPLY MAY RESULT IN MATERIAL
R COMBUSTION.

R (4) Use clean cloth saturated with Aliphatic Naphtha to
R clean mating surfaces, and while still wet, wipe
R surfaces off with clean dry cloth.

R B. Installation

R (1) With brush, apply a .020 inch thick layer of sealing
R compound C-40-1279 to the mating surface of the wing
R tip.

R (2) Immediately position and install the lens assembly.

R (3) Using sealing compound, install bolts wet and secure
R lens assembly to wing tip.

R (4) Smooth the squeeze out, around the periphery of the
R lens retainer, flush with the mating structure to fill
R gap while sealing compound is still wet.

R (5) Using clean cloth dampened with Aliphatic Naphtha,
R clean OFF excessive sealing compound.

R (6) Remove tags from EXTERIOR LIGHTS STROBE and POSITION
R Switchlights.

AFT POSITION LIGHT - REMOVAL AND INSTALLATION

1. Equipment and Materials

Releasing Agent, RAM 225, RAM Chemical Inc., or equivalent

Aluminized Sealing Compound, Aerodynamic Sealing C-40-1279 or equivalent

Clean Lint-Free Cloths

Brush, Nylon Bristle, 1-inch Flat

Plastic Scraper

2. Referenced Procedure

20-51-04	Environmental Sealing of Model L-1011 Airplane - PB75-425D
20-51-15	Application of Adhesives
24-41-00	External Power/Ground Service System - Maintenance Practices

3. Removal/Installation

A. Removal

(1) On Flight Engineer/Second Officers overhead circuit breaker panel CB2, zone 215, open and tag circuit breaker GROUND SERVICE BUS, EXTERIOR LT - WING POSITION - AFT L and R

(2) Remove screws which secure aft position light to wingtip.

(3) Pull light aft and disconnect electrical connector.

B. Installation

(1) Verify that circuit breakers opened in Step 3A(1) are open and tagged.

(2) Connect electrical connector to light.

(3) Set light in position and install screws.

(4) Remove tags and close circuit breakers opened in Step 3A(1).

4. Relamping

A. Aft Position Light

(1) On EXTERIOR LIGHTS section of eyebrow panel, zone 210, verify that POSITION switchlight is in OFF position. Switchlight will indicate OFF if electrical power is on.)

(2) Remove aft position light lens by removing screws.

NOTE: Use a scraper to remove seal bead around base of lens metal housing; then with an up and down rocking motion, break residual sealant to remove lens.

C Lenses experiencing lighting strikes or static
C discharge damage can continue in service,
C providing the affected area depth does not
C exceed 50% of total lens thickness and does not
C adversely affect minimum required lighting.

WARNING: DO NOT ALLOW FINGERS TO TOUCH LAMP. OILS FROM SKIN MAY CAUSE LAMP TO EXPLODE WHEN CURRENT IS APPLIED.

CR (3) Swing lampholders outboard and remove faulty lamp.

CR NOTE: Lamps containing wire leads are replaced by
CR removing screws from light assembly terminals
CR and remove faulty lamp.

CAUTION: WHEN REPLACING A "FUSE TYPE" HIGH INTENSITY LAMP, USE CAUTION SO AS NOT TO BEND RETAINING TAB AT ENDS OF LAMP HOLDER. IF TAB IS BENT OUTWARD, CLOSING THE UNIT AFTER LAMP REPLACEMENT WILL ALLOW LENS COVER ASSEMBLY TO SHORT OUT ON BENT TAB AND MAKE LIGHT INOPERATIVE ONCE AGAIN.

(4) Install replacement lamp and swing lampholders to closed position.

CR NOTE: Lamps containing wire leads are installed by
CR securing terminals with light assembly terminal
CR screws and install lamp in holders.

CR (5) Install lens.

WARNING: • USE RELEASE AGENT IN WELL VENTILATED AREA. DO NOT INHALE VAPOR AND AVOID CONTACT WITH SKIN AND EYES.

• KEEP RELEASE AGENT AWAY FROM HEAT, SPARKS AND OPEN FLAME. FAILURE TO COMPLY MAY RESULT IN MATERIAL COMBUSTION.

CAUTION: DO NOT ALLOW RELEASE AGENT TO COME IN CONTACT WITH LENS.

CR NOTE: Apply releasing agent to faying surfaces where
CR lens metal housing assemblies to light assembly
CR and apply sealing compound (Ref. 20-51-04)
CR between base of lens metal housing and wing.
CR When applying sealing compound, do not force
CR sealing compound between lens metal housing and
CR light assembly.

R (6) Turn on electrical power (Ref. 24-41-00).

R (7) Turn position lights on to test lamp. Turn lights off
R after test.

R (8) Turn off electrical power (Ref. 24-41-00).

B. Aft Strobe Light

(1) On aircraft 015-031 without Grimes SBB5-21286, remove aft position light assembly [Ref. Steps 3A(1), 3A(2), and 3A(3)].

(1) On aircraft 015-031 with Grimes SBB5-21286 and 001-014, 032-999,
on EXTERIOR LIGHTS section of eyebrow panel, zone 210, verify that STROBE switchlight is in OFF position. (Switchlight will indicate OFF if electrical power is on.)

(2) On aircraft 015-031 without Grimes SBB5-21286, remove screws and separate strobe light assembly from position light base assembly.

(2) On aircraft 015-031 with Grimes SBB5-21286 and 001-014, 032-999,
remove aft position light lens by removing screws.

NOTE: Use a scraper to remove seal bead around base of lens metal housing; then with an up and down rocking motion, break residual sealant to remove lens.

(3) Remove aft strobe light lens by removing screws.

WARNING: DO NOT ALLOW FINGERS TO TOUCH LAMP. OILS FROM SKIN MAY CAUSE LAMP TO EXPLODE WHEN CURRENT IS APPLIED.

(4) Wrap clean, soft cloth around flashtube lamp and pull lamp from housing.

(5) Install replacement lamp using clean, soft cloth to protect lamp.

(6) Install strobe light lens.

(7) On aircraft 015-031 without Grimes SBB5-21286, assemble strobe light and position light and install assembly on wingtip [Ref. Steps 3B(1), 3B(2), 3B(3), and 3B(4)].

(7) On aircraft 015-031 with Grimes SBB5-21286 and 001-014, 032-999, install aft position light lens [Ref. Steps 4A(5) - 4A(12)].

(8) Turn on electrical power (Ref. 24-41-00).

(9) Turn strobe lights on to test lamp. Turn lights off after test.

(10) Turn off electrical power (Ref. 24-41-00).

R **WING TIP REACTOR ASSEMBLY - REMOVAL AND INSTALLATION**

R 1. Referenced Procedures

R 6-40-00 Exterior Access Doors and Panels

R 24-00-00 Electrical Power System - Maintenance Practice

R 2. Removal/Installation

R A. Removal

R (1) On Flight Engineer/Second Officers overhead circuit breaker panel, CB2, open and tag the following circuit breakers:

R WING POSITION

R FWD NO. 1 and NO. 2 (K3, K4)

R AFT L and R (K5, K6)

R (2) Gain access to forward electronic service center (FESC) through door 112AB (Ref. 6-40-00).

R (3) Locate wing tip light reactor, aft of electrical rack, at FS 230 on right side of FESC.

R (4) Disconnect electrical connector 3399-P60 from reactor.

R (5) Remove four screws and remove reactor.

R B. Installation

R (1) Verify that circuit breakers opened in Step 2A(1) are open and tagged.

R (2) Install reactor assembly in place with connector forward and secure with screws.

R (3) Connect electrical connector.

R (4) Turn on electrical power (Ref. 24-00-00).

R (5) Remove tags and close circuit breakers opened in Step 2A(1).

R (6) On pilots EXTERIOR LIGHTS panel latch in POSITION lights switchlight. Verify one light in forward left

R and right, and both lights in aft left and right wing
R tips come on.

R (7) Latch in ANTI COLLISION switchlight. Verify second
R light in both forward wing tip lights come on.

R (8) Unlatch both switchlights.

R (9) Turn off electrical power (Ref. 24-00-00).

WING FLOODLIGHTING - DESCRIPTION AND OPERATION

1. General

A wing floodlight assembly is mounted on each side of the fuselage, zones 132 and 133, to illuminate the wing leading edge and the engine air inlets. The lights are used to check for icing conditions and to provide illumination for the ground crew. A WING FLOOD switchlight on the EXTERIOR LIGHTS section of the eyebrow panel in the flight station is used to control the wing floodlights.

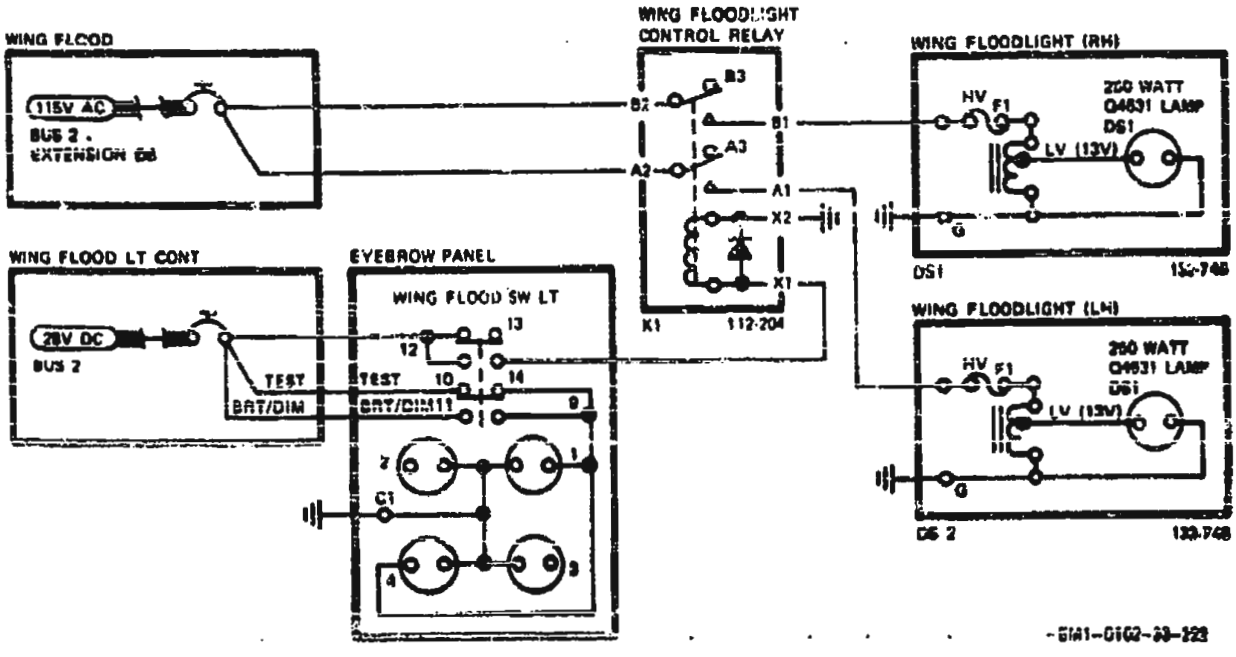
2. Operation (Ref. Fig. 1)

The wing floodlights receive electrical power from the Flight Engineer/Second Officer overhead circuit breaker panel, CB2, zone 215. The 115V ac, 400-Hz, phase B, power is supplied
R through the WING FLOOD (G4) circuit breaker to the normally open contacts of the wing floodlight control relay. The 28V dc power
R is supplied through the WING FLOOD LT CONT (F3) circuit breaker to the WING FLOOD switchlight on the evebrow panel. When the switchlight is actuated, the ON legend comes on and 28V dc power is applied to the wing floodlight control relay, the relay contacts close and 115V ac power is applied to both floodlight assemblies (RH and LH) stepdown autotransformers (115/13V ac), 13V ac is then supplied to each quartz lamp. Each autotransformer is provided an line-replaceable fuse (F1) for overload protection.

3. Wing Floodlight (Ref. Fig. 2)

A. Description and Operation

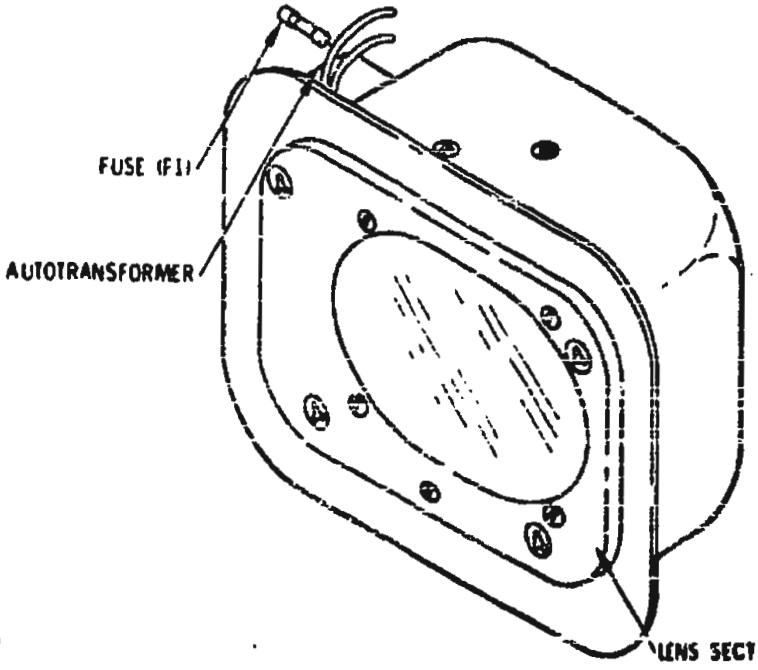
Each wing floodlight contains a quartz lamp assembly which operates on 13V ac, 115/13V ac step-down autotransformer with fuse (F1) as an integral part of the transformer assembly and a lens assembly.



R Wing Floodlights Schematic Diagram
R Figure 1

EFFECTIVITY: ALL

001B



M1-0000-33-382

R
R Wing Floodlight Assembly
Figure 2

R EFFECTIVITY: ALL
R
R
001B

R # WING FLOODLIGHTING - FAULT ISOLATION

R 1. General

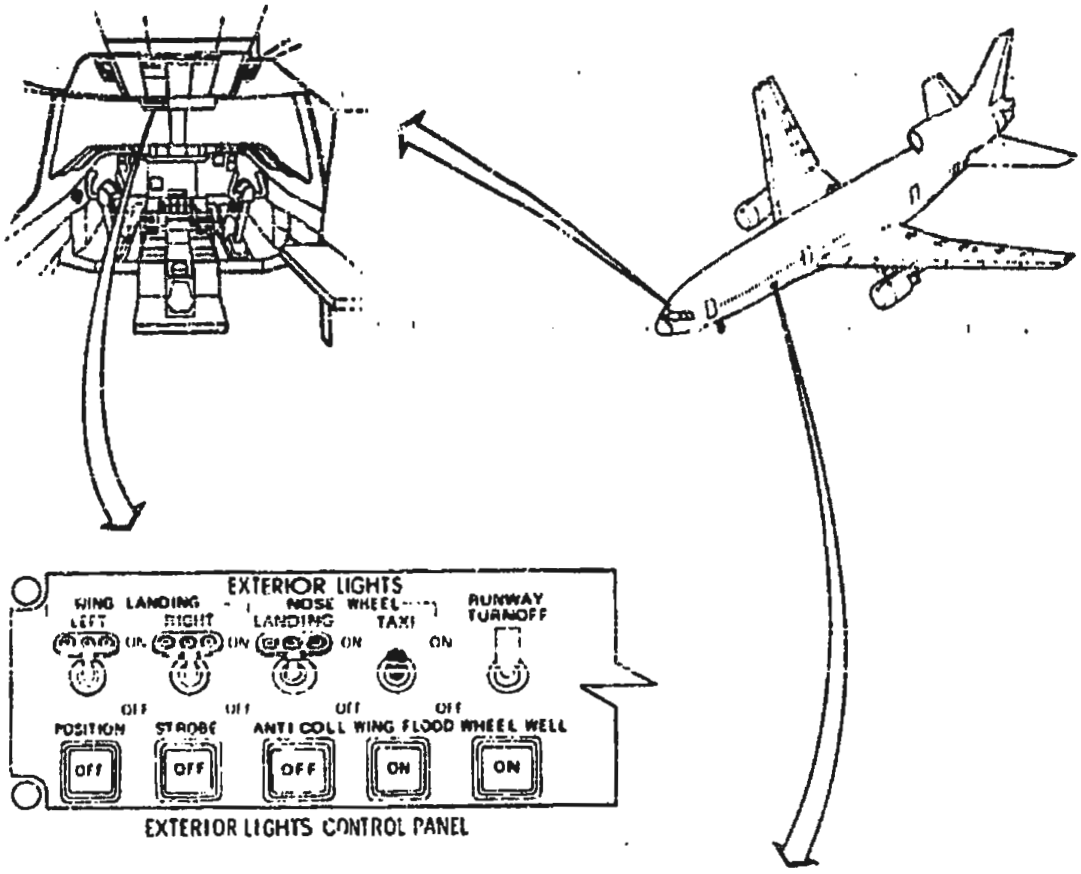
R The electrical schematic in this section can be used for fault isolation any time a fault is reported or suspected. Due to the relative simplicity of the circuit, no detailed fault isolation procedures are provided. Refer to the Maintenance Manual Introduction for a detailed discussion of the Fault Isolation Reporting Method (FIRM) and use of fault isolation diagrams/schematics.

R 2. Fault Isolation/Identification

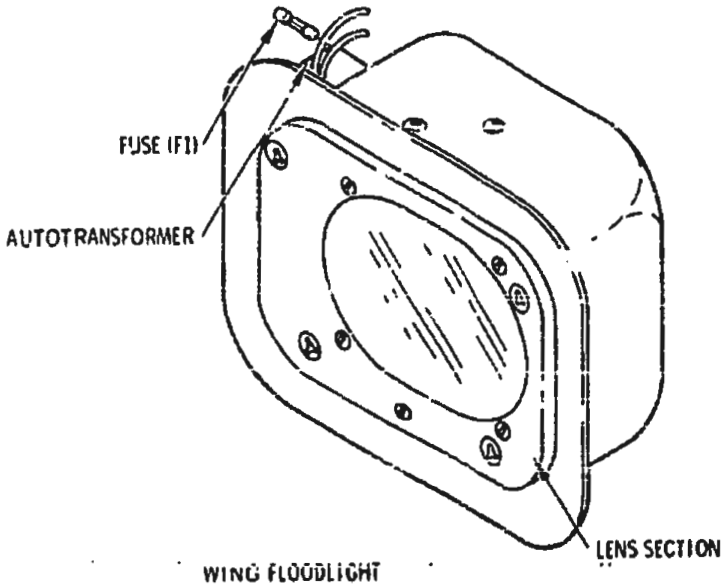
R Table 101 lists the fault isolation diagrams and schematics in this section.

R Table 101

FIGURE	TITLE
101	Component Locator Diagram
SCHEM 1	Wing Floodlights Schematic

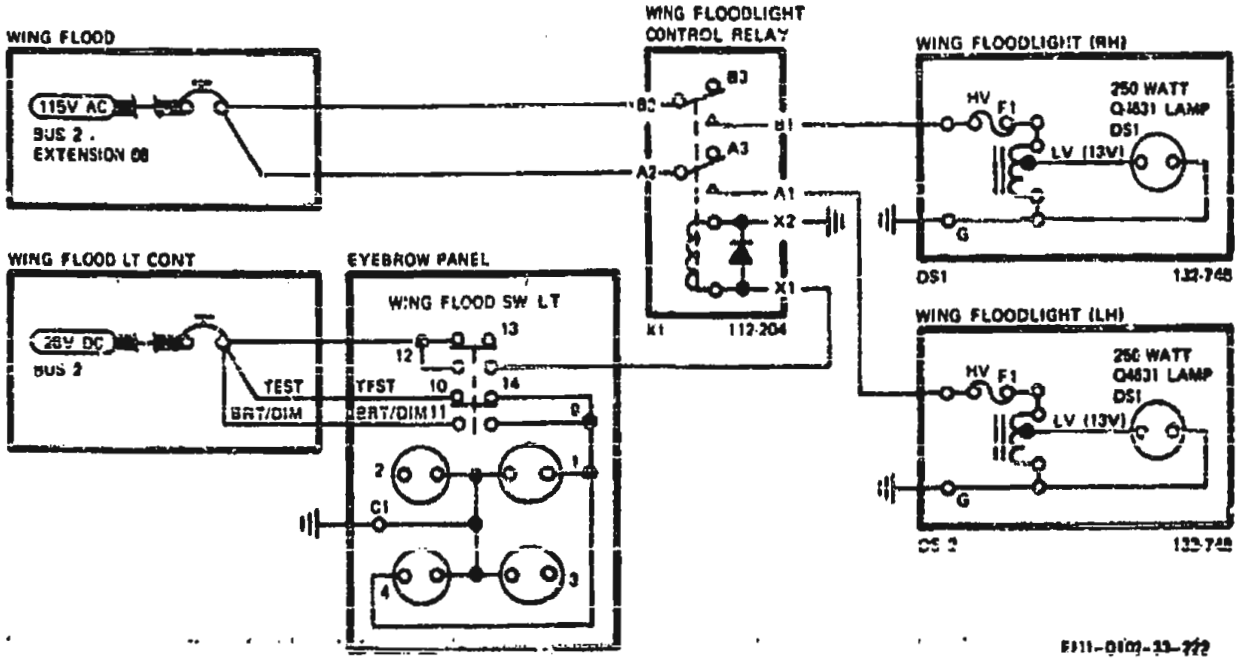


EXTERIOR LIGHTS CONTROL PANEL



WING FLOODLIGHT

Component Locator Diagram
Figure 101



R Wing Floodlights Schematic
R SCHEM 1

R EFFECTIVITY: ALL
R
001B

WING FLOODLIGHT - REMOVAL AND INSTALLATION

1. Referenced Procedures

   24-00-00 External Power/Ground Service System

2. Removal and Installation

   A. Removal (Transformer)

      (1) On Flight Engineer/Second Officers overhead circuit breaker panel CB2, zone 215, open and tag circuit breaker EXTERIOR LIGHT - WING FLOOR (G3).

      (2) Loosen captive screws securing floodlight lens to floodlight mounting plate and allow lens to hang by wire rope lanyard (Ref. Fig. 401).

      (3) Remove two screws securing lamp retainer and lamp to lamp bracket.

      (4) Pull lamp and lamp retainer away from lamp bracket; disconnect transformer leads from lamp terminals and remove lamp.

      (5) On passenger compartment floor, zone 240, F.S. 729-749, locate and remove applicable left or right floodlight access panel and gain access to floodlight assembly.

      NOTE: If passenger seat removal is necessary, refer to 25-21-05,401.

      (6) On transformer, remove two nuts securing terminal cover to terminal block and remove terminal cover.

      (7) Disconnect and tag aircraft wiring from terminal block.

      (8) Remove four screws securing lamp bracket to inside of floodlight housing.

      (9) From outside aircraft, remove lamp bracket from floodlight housing.

      CAUTION: BEFORE REMOVING TRANSFORMER ATTACHMENT SCREWS, TRANSFORMER MUST BE HELD STATIONARY INSIDE AIRCRAFT.

      (10) From outside aircraft, remove four screws attaching transformer to side of floodlight housing.

(11) Remove transformer from inside aircraft.

B. Installation (Transformer)

(1) Verify circuit breaker opened in Step 2A(1) is open and tagged.

(2) From inside aircraft, pass transformer leads through hole in floodlight housing; position and hold transformer stationary on floodlight housing.

(3) From outside aircraft, install four screws attaching transformer to floodlight housing.

(4) Position and hold lamp bracket stationary inside floodlight housing.

(5) From inside aircraft, install four screws securing lamp bracket inside floodlight housing.

(6) Connect aircraft wiring to terminal block connections and position terminal cover on terminal block.

(7) Install two nuts securing terminal cover to terminal block.

(8) Position and install floodlight access panel on passenger compartment floor.

(9) From outside aircraft, connect transformer leads to lamp terminals.

(10) Position lamp and lamp retainer on lamp bracket.

(11) Install two screws securing lamp and lamp retainer on lamp bracket.

(12) Position lens on floodlight mounting plate and tighten captive screws.

(13) Remove tag and close circuit breaker opened in Step 2A(1).

(14) Turn on electrical power (Ref. 24-00-00).

(15) Verify proper operation of wing floodlight.

(16) Turn off electrical power (Ref. 24-00-00).

3. Relamping

A. Wing Floodlight

(1) On Flight Engineer/Second Officers overhead circuit breaker panel CB2, zone 215, open and tag circuit breaker EXTERIOR LIGHTS - WING FLOOD (G3).

(2) Loosen captive screws securing floodlight lens and allow lens to hang by wire rope lanyard (Ref. Fig. 401).

(3) Remove two screws securing lamp retainer and lamp to lamp bracket.

(4) Pull lamp and lamp retainer away from lamp bracket; disconnect transformer leads from faulty lamp terminals and connect to replacement lamp terminals.

(5) Position lamp and lamp retainer on lamp bracket.

(6) Install two screws securing lamp and lamp retainer to lamp bracket.

(7) Position lens on floodlight mounting plate and tighten captive screws.

(8) Remove tag and close circuit breaker opened in Step 3A(1).

(9) Turn on electrical power (Ref. 24-00-00).

(10) Verify proper operation of wing floodlight.

(11) Turn off electrical power (Ref. 24-00-00).

4. Refusing

A. Wing Floodlight

(1) On Flight Engineer/Second Officers overhead circuit breaker panel, zone 215, open and tag circuit breaker EXTERIOR LIGHTS - WING FLOOD (G3).

(2) On passenger compartment floor, zone 240, F.S. 729-749, locate and remove applicable left or right floodlight access panel and gain access to floodlight assembly.

NOTE: If passenger seat removal is necessary, refer to 25-21-05,401.

(3) Locate fuse holder on floodlight assembly transformer and replace fuse (Ref. Fig. 401).

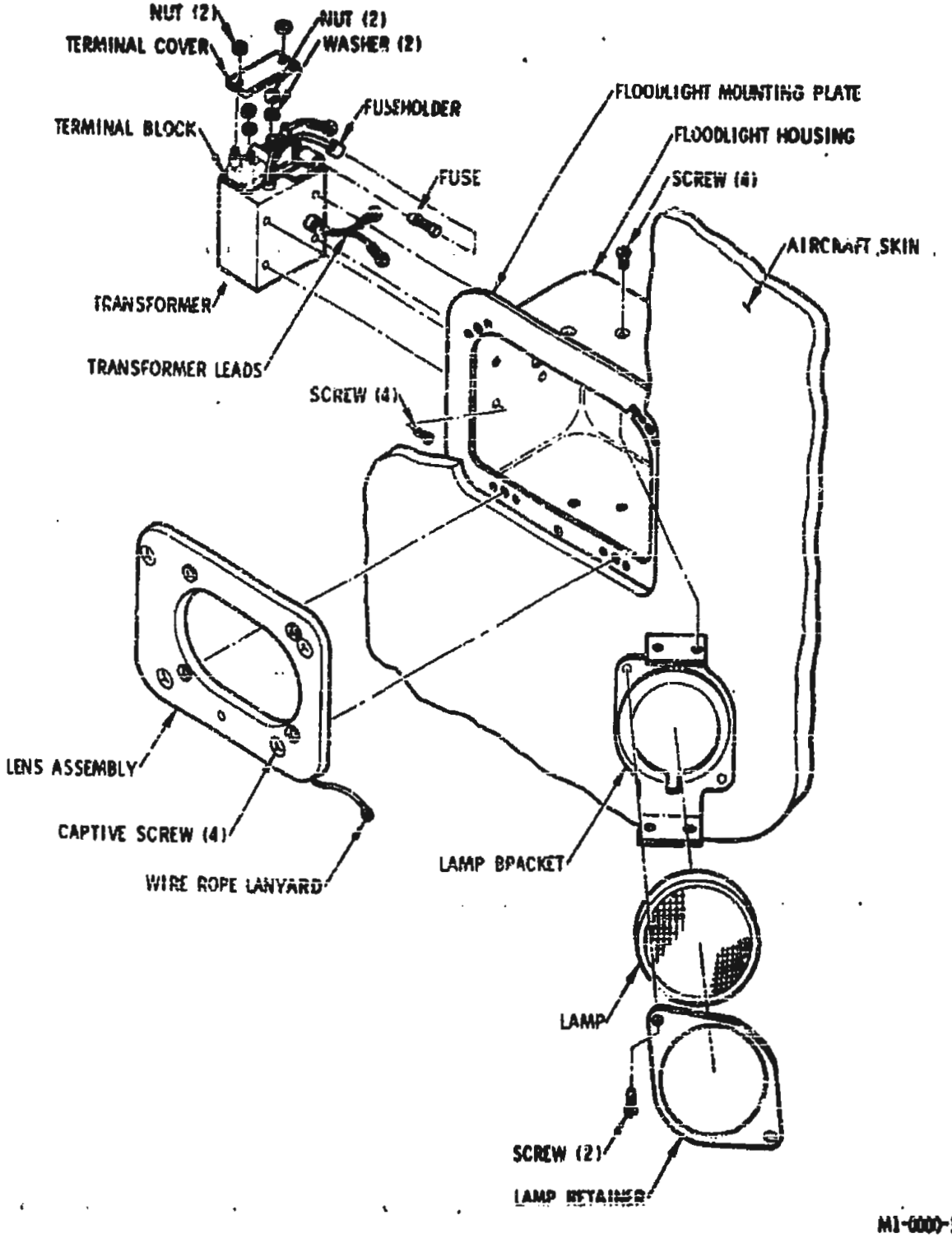
(4) Position and install floodlight access panel on passenger compartment floor.

(5) Remove tag and close circuit breaker opened in Step 4A(1).

(6) Turn on electrical power (Ref. 24-00-00).

(7) Verify proper operation of wing floodlight.

(8) Turn off electrical power (Ref. 24-00-00).



Wing Floodlight Assembly - Removal and Installation
Figure 401

EFFECTIVITY: 001-025

R

WING FLOODLIGHT - REMOVAL AND INSTALLATION

R 1. Referenced Procedures

R 20-51-04 Environmental Sealing of L-1011 Airplane - PB75-425

R 20-51-15 Application of Adhesives

R 24-00-00 Electrical Power - Maintenance Practices

R 2. Equipment and Materials

R Sealing Compound, Low Adhesion, C-40-769 Type I or II or
R equivalent

R Aliphatic Naphtha, Type II, Fed. Spec. TT-N-95 or equivalent

R Adhesive; Rubber Base, MIL-A-5092, Type III or equivalent

R Methyl-Ethyl-Ketone (MEK), Fed. Spec. TT-M-261 or equivalent

R Clean Lint-Free Cloths

R Brush; Nylon Bristle, 1-inch flat

R Plastic Scraper

R 3. Removal/Installation (Ref. Fig. 401)

R A. Removal

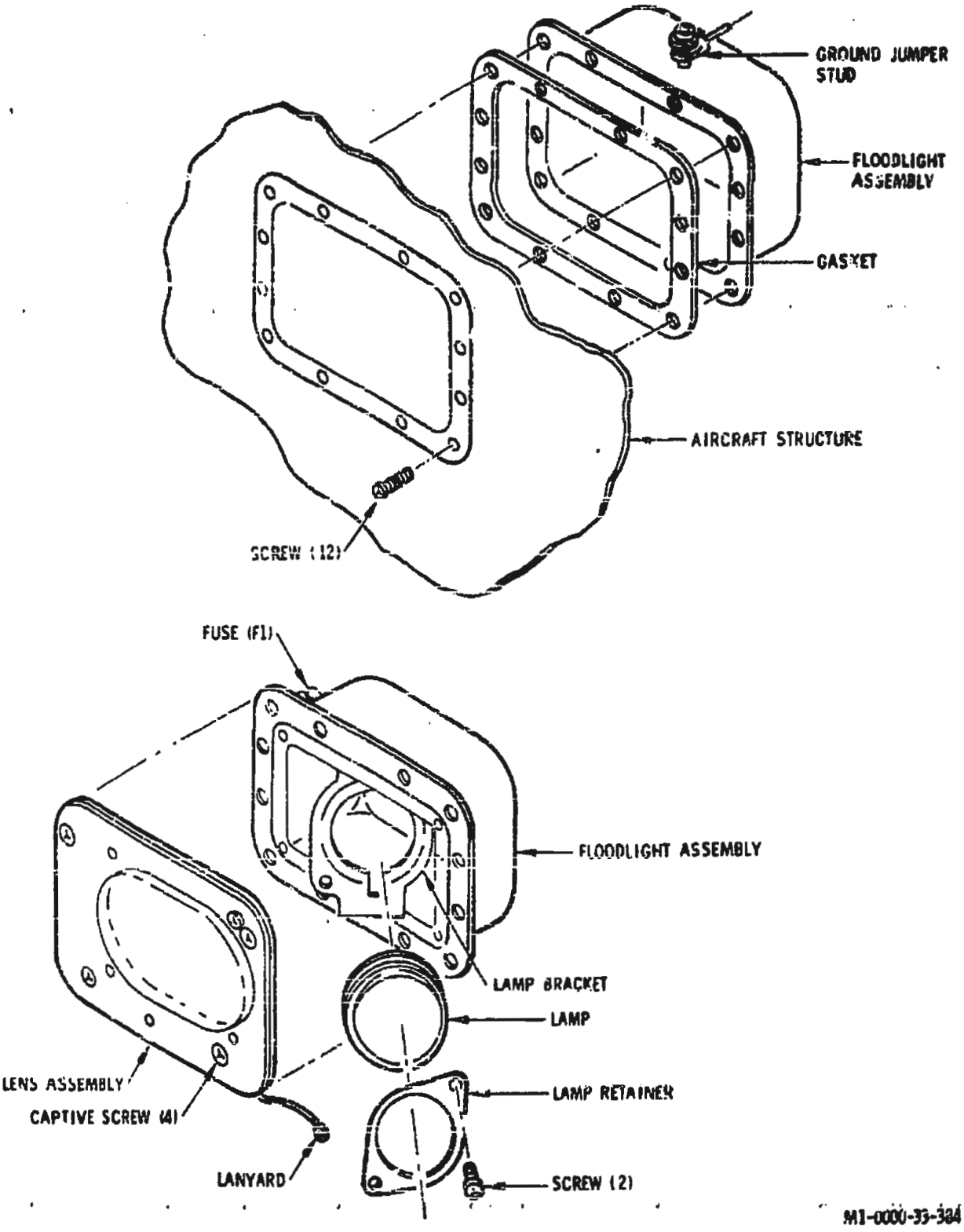
R (1) On Flight Engineer/Second Officers overhead circuit
R breaker panel CB2, zone 215, open and tag circuit
R breaker EXTERIOR LIGHT - WING FLOOD (G3).

R (2) Loosen captive screws securing floodlight lens and
R allow lens to hang by wire rope lanyard.

R (3) Remove screws securing floodlight assembly to fuselage
R structure.

R (4) Disconnect and tag electrical leads from floodlight
R transformer terminal block and disconnect ground jumper
R from top of floodlight assembly.

R (5) Carefully remove floodlight assembly through fuselage
R opening.



R Floodlight Assembly - Removal and Installation
R Figure 401

(6) If floodlight assembly is to be reinstalled, ensure gasket material is not damaged before reinstallation.

B. Installation

(1) Verify circuit breaker opened in Step 3A(1) is open and tagged.

(2) If previously removed floodlight assembly is being reinstalled, ensure gasket is in good condition.

WARNING: • DO NOT ALLOW ADHESIVE TO CONTACT SKIN OR EYES. PROLONGED EXPOSURE MAY RESULT IN SKIN AND/OR EYE IRRITATION.

• USE NAPHTHA IN WELL-VENTILATED AREA. DO NOT INHALE VAPOR AND AVOID CONTACT WITH SKIN AND EYES.

• KEEP NAPHTHA AWAY FROM HEAT, SPARKS AND OPEN FLAME. FAILURE TO COMPLY MAY RESULT IN MATERIAL COMBUSTION.

(3) If new floodlight assembly is being installed, perform gasket installation:

(a) Using clean lint-free cloth saturated with aliphatic naphtha, clean floodlight bonding surface; and while still wet, wipe surface dry with clean dry cloth.

(b) Using small brush, apply rubber base adhesive to bonding surfaces and install gasket (Ref. 20-51-15) to floodlight assembly.

R
R

WARNING: • KEEP METHYL-ETHYL-KETONE (MEK) AWAY FROM HEAT, SPARKS AND OPEN FLAME. FAILURE TO COMPLY MAY RESULT IN MATERIAL COMBUSTION.

• USE MEK IN WELL-VENTILATED AREA. AVOID FLUID CONTACT WITH SKIN AND EYES. PROLONGED EXPOSURE MAY RESULT IN SKIN AND/OR EYE IRRITATION.

(c) Using clean cloth dampened with MEK, remove excessive adhesive.

(4) Unless previously accomplished, loosen captive screws securing floodlight lens section and allow lens to hang by lanyard.

(5) Position floodlight assembly through fuselage opening.

R (6) Connect ground jumper to floodlight housing ground stud. Connect electrical leads to transformer terminal block connections and remove tags.

R (7) Using sealing compound, install screws wet, securing floodlight assembly to fuselage structure (Ref. 50-51-04).

R (8) Using clean cloth saturated with aliphatic naphtha, remove excessive sealing compound from screw heads.

R (9) Tighten captive screws, securing lens to floodlight assembly.

R (10) Remove tag and close circuit breaker opened in Step 3A(1).

R (11) Turn on electrical power (Ref. 24-00-00).

R (12) Turn on wing floodlights to test. Turn off after test.

R (13) Turn off electrical power (Ref. 24-00-00).

R 4. Relamping

R A. Wing Floodlight

R (1) On Flight Engineer/Second Officers overhead circuit breaker panel CB2, zone 215, open and tag circuit breaker EXTERIOR LIGHTS - WING FLOOD (G3).

R (2) Remove lens by loosening screws. Allow lens to hang by lanyard.

R (3) Remove lamp retainer.

R (4) Pull lamp away from bracket; disconnect transformer leads from faulty lamp and connect to replacement lamp.

R (5) Position lamp in bracket and install lamp retainer.

R (6) Install lens.

R (7) Turn on electrical power (Ref. 24-00-00).

R (8) Remove tag and close circuit breaker opened in Step 4A(1).

R (9) Turn on wing floodlights to test lamp. Turn lights off after test.

R (10) Turn off electrical power (Ref. 24-00-00).

R 5. Refusing (Ref. Fig. 401)

R A. Wing Floodlight

R (1) Remove floodlight assembly per Steps 3A(1)-(6).

R (2) Locate fuseholder on floodlight assembly transformer.
R Replace fuse (F1).

R (3) Install floodlight assembly per Steps 3B(1)-(13).

MARKINGS LIGHTING - DESCRIPTION AND OPERATION

1. General

A logo light assembly is mounted on the left and right horizontal stabilizer, zones 333 and 343, to light the logo on the vertical fin.

The ac bus 1 extension (Ref. Fig. 1) supplies 115V ac, 400-Hz, phase A power for the left logo light, and phase B power for the right logo light.

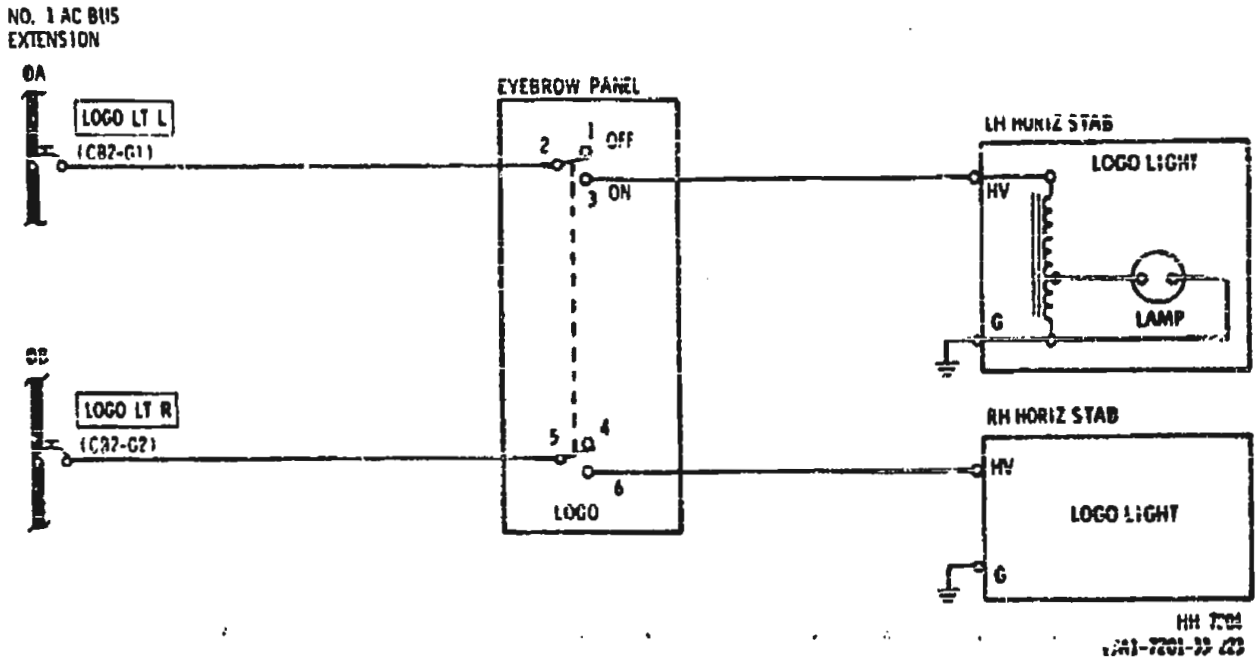
R Circuit protection is provided by LOGO LT L H(G2) and LOGO LT R
R H(G3) circuit breakers on the Flight Engineer Second Officers overhead circuit breaker panel CB2, zone 215.

When the LOGO toggle switch on the EXTERIOR LIGHTS section of the eyebrow panel is actuated, the logo lights are energized.

2. Logo Light

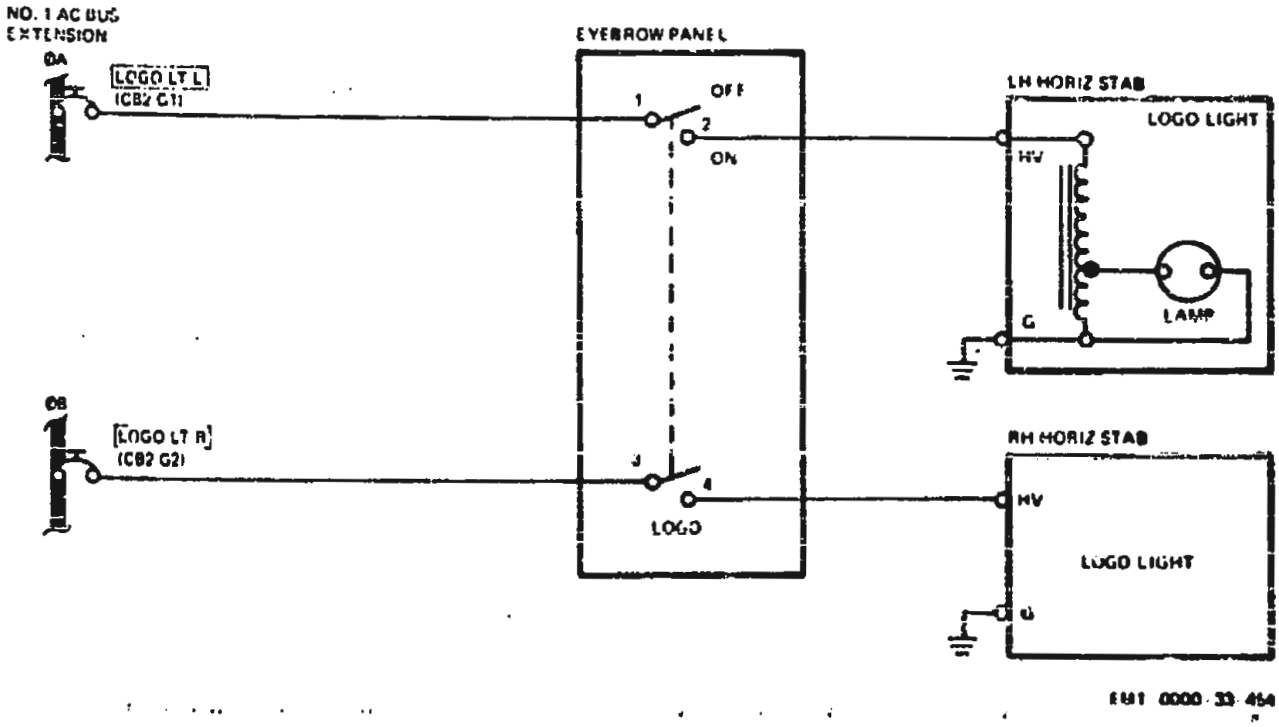
A. Description and Operation

Each logo light assembly uses a quartz lamp which operates on 28V ac. A 115/28V ac stepdown autotransformer is installed as an integral part of the logo light assembly.



Logo Lights Schematic
Figure 1

R EFFECTIVITY: 001-031 WITHOUT SB33-070
R
0013B



Logo Lights Schematic
Figure 1

LOGO FLOODLIGHT - REMOVAL AND INSTALLATION

1. Equipment and Materials

Releasing Agent, RAM 225, RAM Chemical Inc., or equivalent

Sealing Compound, PR 1436G, Class B-2, Product Reseerch Corporation, or equivalent

Scraper, Sharpened plastic (such as MICARTA) or wood blade.

2. Referenced Procedure

20-51-04	Environmental Sealing - Maintenance Practices
24-41-00	External Power/Ground Service System - Maintenance Practices

3. Removal/Installation

A. Removal

(1) On Flight Engineer/Second Officers overhead circuit breaker panel CB2, zone 215, open and tag circuit
R breaker LOGO (G2) - L or R (G3)

(2) Remove screws securing lens assembly to logo light (Ref. Fig. 401). Remove lens assembly.

(3) Remove screws securing logo light to horizontal stabilizer.

(a) Use a scraper to remove the seal bead around the light mounting ring and break residual sealant to remove light.

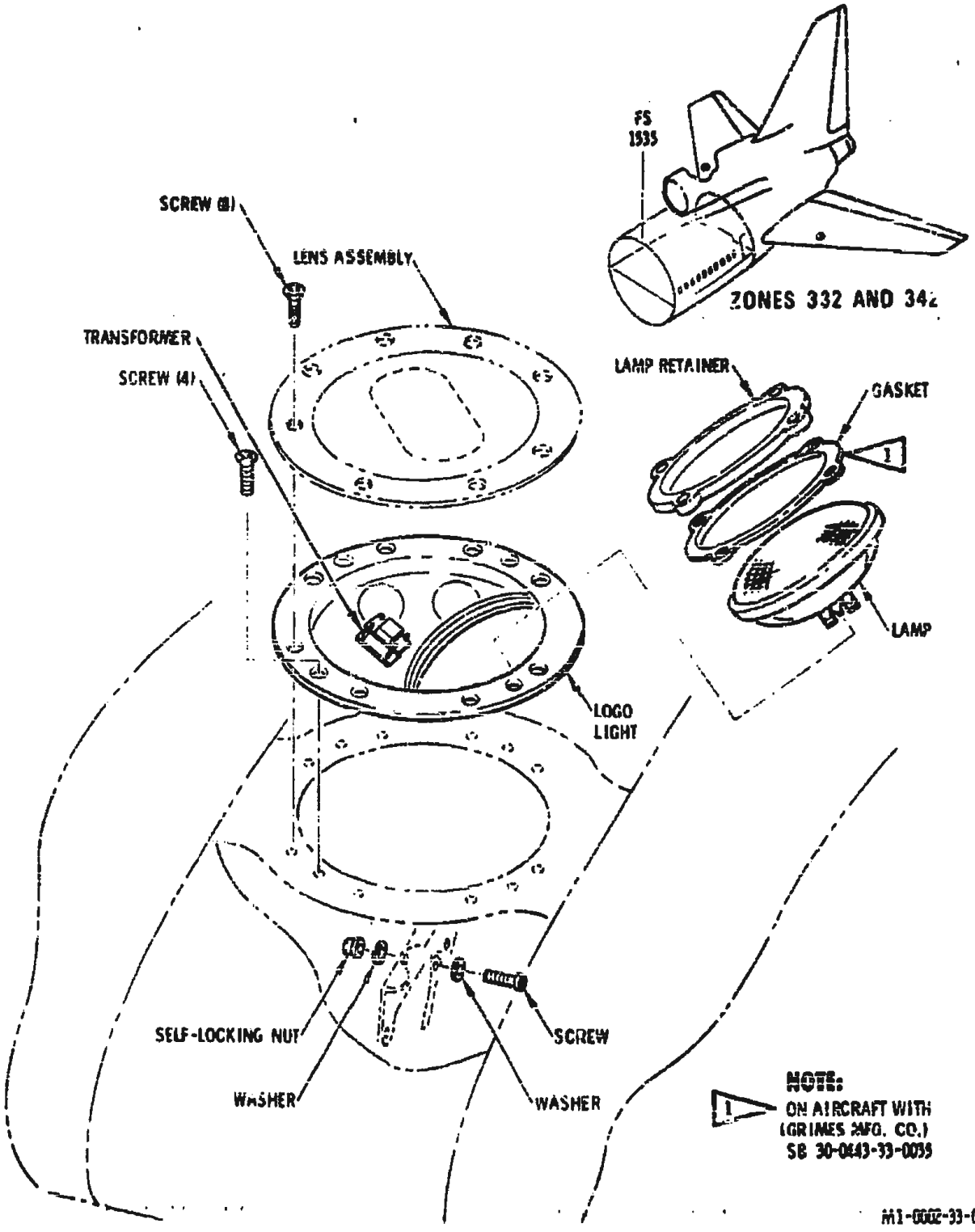
(4) Withdraw logo light sufficiently to gain access to terminal block on underside of light housing. Remove and tag wires on terminal block.

(5) Disconnect bonding strap and remove logo light.

B. Installation

(1) Verify that circuit breaker opened in Step 2A(1) is open and tagged.

(2) Connect bonding strap.



R R Logo Floodlight - Removal and Installation
Figure 401

EFFECTIVITY: ALL

(3) Remove tags and connect wires to terminal block on logo light housing.

(4) Position logo light in horizontal stabilizer recess and secure with screws.

R WARNING: USE RELEASE AGENT IN WELL VENTILATED AREA.
R DO NOT INHALE VAPOR AND AVOID CONTACT WITH
R SKIN AND EYES.

R KEEP RELEASE AGENT AWAY FROM HEAT, SPARKS AND
R OPEN FLAME. FAILURE TO COMPLY MAY RESULT IN
R MATERIAL COMBUSTION.

R CAUTION: DO NOT ALLOW RELEASE AGENT TO COME IN CONTACT
R WITH LENS.

(a) Apply releasing agent to lower surface of light
R mounting ring and lens frame. Scrape off old
R sealant with plastic scraper. Environmentally seal (Ref. 20-51-04) lens frame to light mounting ring and light mounting ring to aircraft.

(5) Install lens assembly and secure with screws.

(6) Remove tag and close circuit breaker opened in Step 2A(1).

4. Relamping

A. Logo Floodlight

(1) Repeat Step 3A(1).

(2) Remove lens-retaining screws and allow lens to hang by lanyard.

(a) Use a scraper to remove the seal bead around the lens frame and break residual sealant to remove lens.

NOTE: On aircraft with (GRIMES MFG. CO.) SB30-0443-33-0035, remove lamp leads securing strap.

(3) Loosen screws and remove lamp retainer.

NOTE: On aircraft with (GRIMES MFG. CO.) SB30-0443-33-0035, check gasket, if damaged discard.

(4) Remove faulty lamp.

(5) Install replacement lamp.

(6) Install lamp retainer.

NOTE: On aircraft with (GRIMES MFG. CO.) SB30-0443-33-0035, make sure gasket is in place.

(7) Turn on electrical power (Ref. 24-41-00).

(8) Turn on logo light to test lamp. Turn light off after test.

(9) Turn off electrical power (Ref. 24-41-00).

(10) Install logo light lens.

NOTE: On aircraft with (GRIMES MFG. CO.) SB30-0443-33-0035, install lamp leads securing strap before installing logo light lens.

R WARNING: USE RELEASE AGENT IN WELL VENTILATED AREA.
R DO NOT INHALE VAPOR AND AVOID CONTACT WITH
R SKIN AND EYES.

R KEEP RELEASE AGENT AWAY FROM HEAT, SPARKS AND
R OPEN FLAME. FAILURE TO COMPLY MAY RESULT IN
R MATERIAL COMBUSTION.

R CAUTION: DO NOT ALLOW RELEASE AGENT TO COME IN CONTACT
R WITH LENS.

(a) Apply releasing agent to lower surface of lens
R frame. Scrape off old sealant with plastic
R scraper. Environmentally seal (Ref. 20-51-04) lens frame to light ring.

5. Replace Transformer

A. Logo Floodlight

(1) Accomplish Par. 3A. Steps 1 thru 4

(2) Remove four transformer retainer screws, retainer and transformer located on the Logo Floodlight.

(3) Install replacement transformer using the retainer and four retainer screws.

(4) Connect transformer and aircraft wires to the terminal block. Remove wire tags.

(5) Accomplish Par. 3B. Steps 4, 5 & 6.

(6) Turn on logo light to confirm proper operation.

(7) Turn off logo light.

EMERGENCY LIGHTING SYSTEM - DESCRIPTION AND OPERATION

1. General

The emergency lighting system uses 10 emergency power packs to provide power for emergency incandescent lighting in the flight station, passenger compartments, and galley (Ref. Fig. 1).

The system is controlled and monitored by a guarded EMERGENCY LIGHTING switch and an UNARM light on the pilots eyebrow panel in the flight station. In addition, a guarded EMER switchlight is installed on the forward and aft cabin attendants panels.

On aircraft 032-999,
there is also a guarded EMER switchlight installed on the intercom panel in the lower galley.

2. Operation

In normal operation with the EMER LT CHARGE SENSE circuit breaker (CB3, J6) closed and the EMERGENCY LIGHTING switch in the ARM position (Ref. Fig. 2), the dc essential bus is monitored by each of the emergency power packs. Loss of bus power will be sensed by the power pack and battery power will be provided to the emergency lights.

The emergency lights can be manually turned on by setting the EMERGENCY LIGHTING switch to ON, or by actuating one of the EMER switchlights.

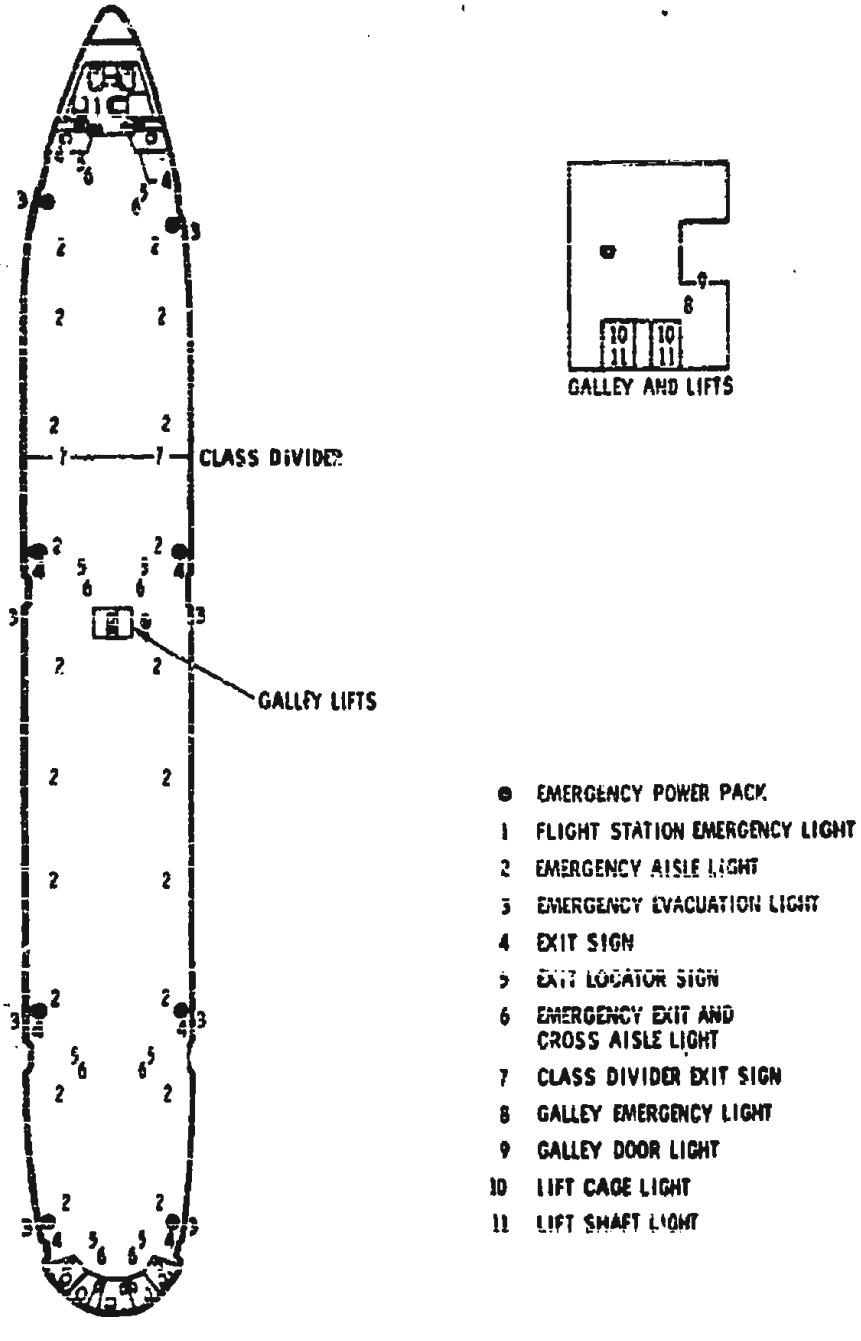
On aircraft 001-031 without SB33-086,
the UNARM light on the eyebrow panel is powered by the dc standby bus. When the EMERGENCY LIGHTING switch is in the ON or OFF position, the light circuit is completed to ground.

On aircraft 032-999 and 001-031 with SB33-086,
the UNARM light on the eyebrow panel is powered by the dc essential bus. When The EMERGENCY LIGHTING switch is in the ON or OFF position the light circuit is completed to ground.

The power pack charging circuits are powered by the ac essential bus.

3. Emergency Power Pack

A. Description and Operation



HH 7705
M1-0100-33-2P2

Emergency Light and Power Pack Locations
Figure 1 (Sheet 1)

POWER PACK NO.	POWER PACK LOCATION	EMERGENCY LIGHTS											
		FLIGHT STATION EMERGENCY LIGHT	EXIT LOCATOR SIGN	EXIT SIGN (WALL)	EMERGENCY EXIT & CROSS AISLE LIGHT	EMERGENCY EVACUATION LIGHT	EMERGENCY AISLE LIGHT	CLASS DIVIDER EXIT SIGN	LIFT CAGE LIGHT	LIFT SHAFT LIGHT	GALLEY LOADING DOOR LIGHT	GALLEY EMERGENCY LIGHT	
1	FORWARD LH PASSENGER DOOR (L-1)	1	1	1	1	1	2						
2	FORWARD RH PASSENGER DOOR (R-1)		1	1	1	1	2						
3	CENTER LH PASSENGER DOOR (L-2)		1	1	1	1	1	1					
4	CENTER RH PASSENGER DOOR (R-2)		1	1	1	1	1	1					
5	AFT LH PASSENGER DOOR (L-3)		1	1	1	1	2						
6	AFT RH PASSENGER DOOR (R-3)		1	1	1	1	2						
7	AFT LH EMERGENCY DOOR (L-4)		1	1	1	1	2						
8	AFT RH EMERGENCY DOOR (R-4)		1	1	1	1	2						
9 (1)	CENTER CABIN						4		1	1			
9 (2)	CENTER CABIN						6						
10 (1)	GALLEY						2		1	1	1	1	
10 (2)	GALLEY								2	2	1	1	

(1) ON AIRCRAFT 032-999

(2) ON AIRCRAFT 001-031

M1-0000-33-1953

R Emergency Light and Power Pack Locations
R Figure 1 (Sheet 2)

R Each emergency power pack (Ref. Fig. 3) contains a nickel
R cadmium battery, a battery charging circuit, logic and light
R switch circuits to monitor aircraft dc essential power, and
R a test circuit. A test switch, two indicator lights, four
R circuit breakers, and two test jacks are incorporated on a
R recessed panel. The red light indicates a blown fuse; the
R amber light indicates the battery is charging.

R The battery charging circuit maintains the power pack in a
R charged condition at all times during normal operation with
R aircraft power available. A completely discharged battery
R will be restored to 85 percent of capacity in one hour; in
R two hours it will be fully charged. The charging circuit is
R inhibited when the aircraft emergency lights are on.

R The emergency power pack switching logic is shown on Fig. 4.

R 4. Emergency Lights

R The emergency lighting system includes light fixtures used only
R for emergency lighting, as well as the emergency lamps in
R dual-purpose fixtures. The following are single-purpose lights
R used only for emergency lighting:

R A. Emergency Evacuation Lights

R Eight emergency evacuation lights (Ref. Fig. 5), one next to
R each passenger door, are installed in the fuselage exterior
R to illuminate the emergency evacuation slides. Each light
R fixture incorporates two lamps. Left and right lights are
R similar except for reflector angles.

R B. Emergency Exit and Cross Aisle Lights

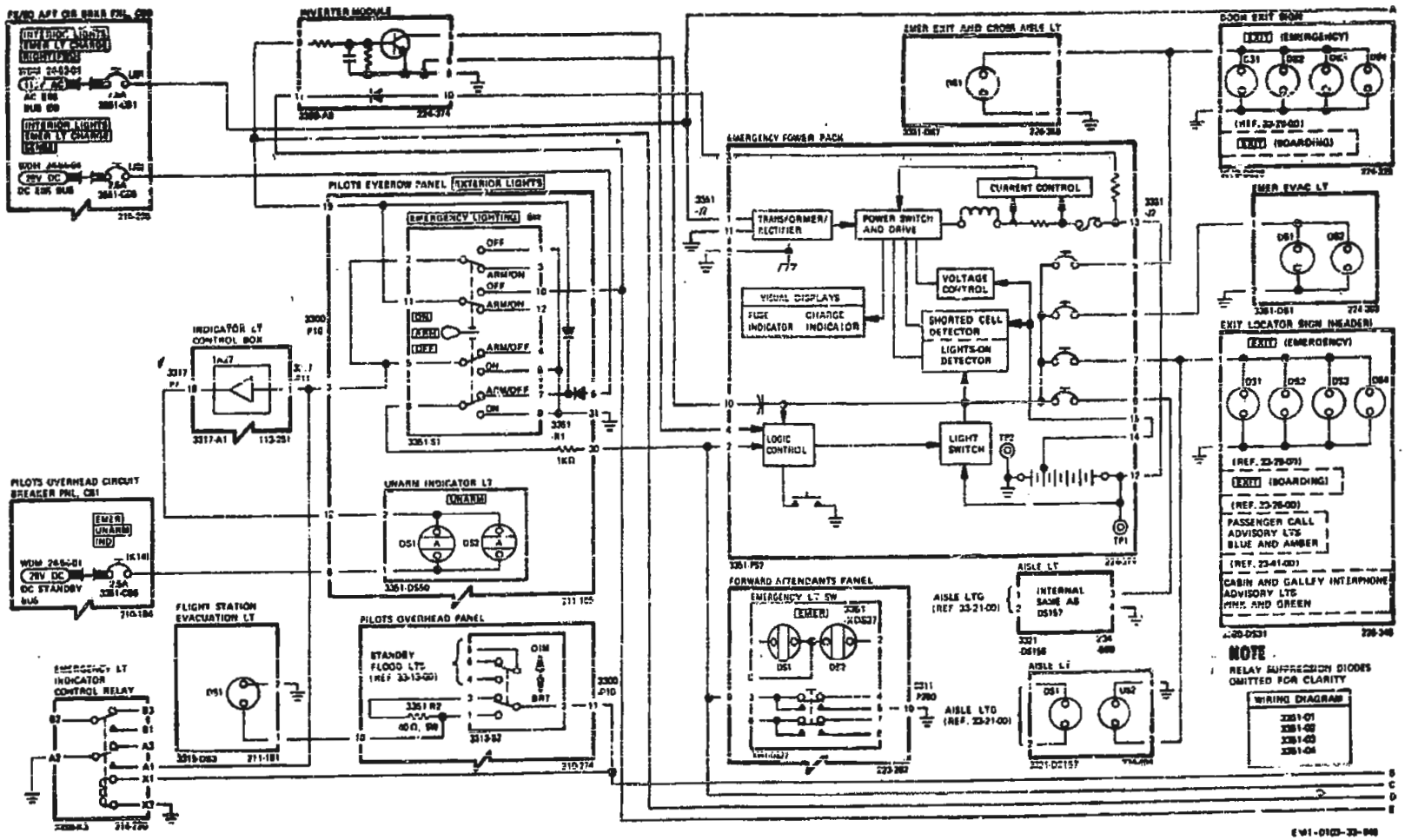
R Eight emergency exit and cross aisle lights (Ref. Fig. 6),
R one next to each doorway, are installed in the passenger
R compartment ceiling to illuminate the door threshold and
R cross aisle areas.

R C. Flight Station Emergency Light

R The flight station emergency light (Ref. Fig. 7) is
R installed in the overhead center trim panel. The INSTR STBY
R LIGHTS switch on the pilots overhead panel controls
R brightness of the emergency light as well as the standby
R floodlights (Ref. 33-13-00).

R D. Galley Emergency Light

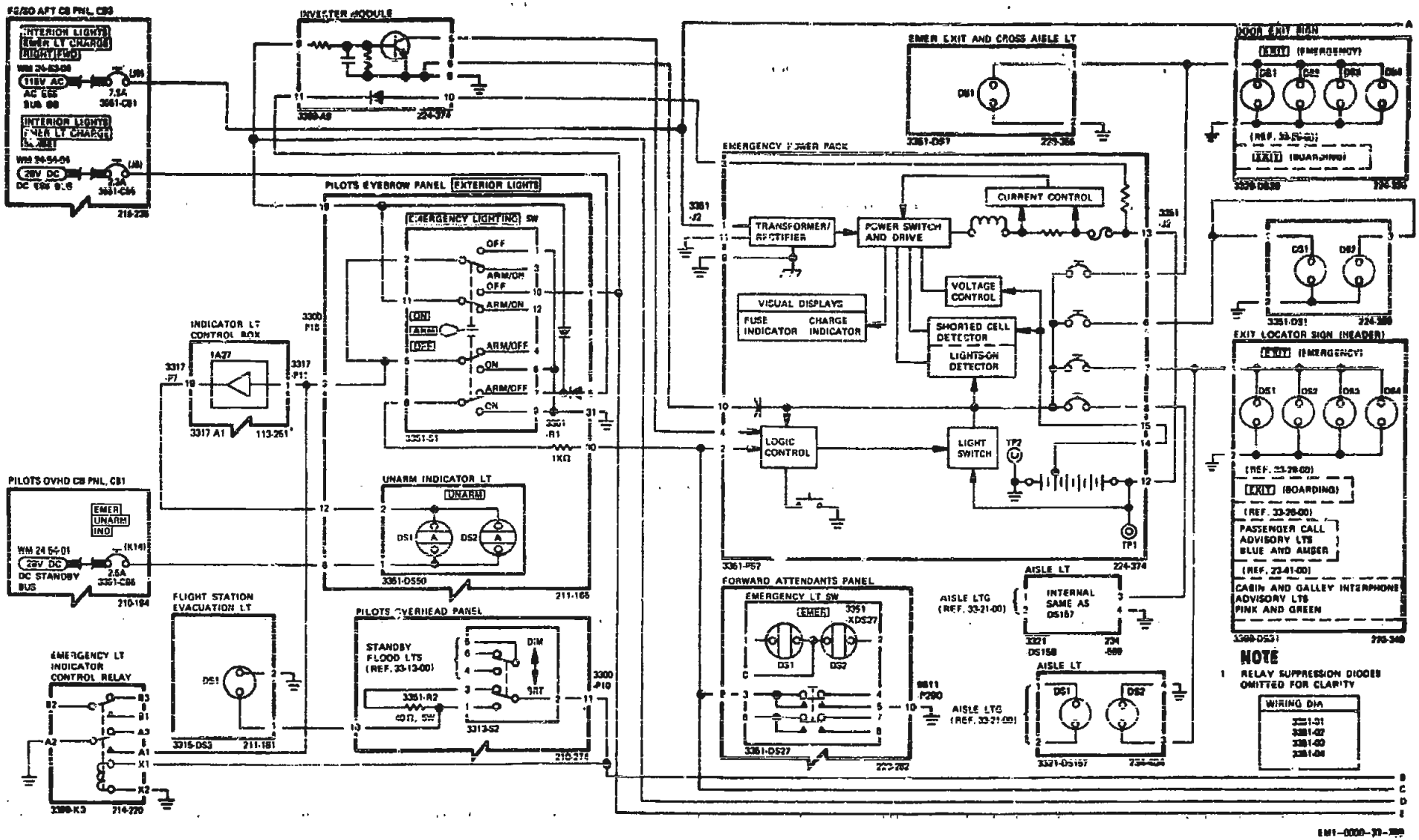
R The galley emergency light is installed in the galley
R ceiling.



Emergency Lighting Schematic
Figure 2 (Sheet 1)

EFFECTIVITY: 001-023 WITHOUT SB33-086

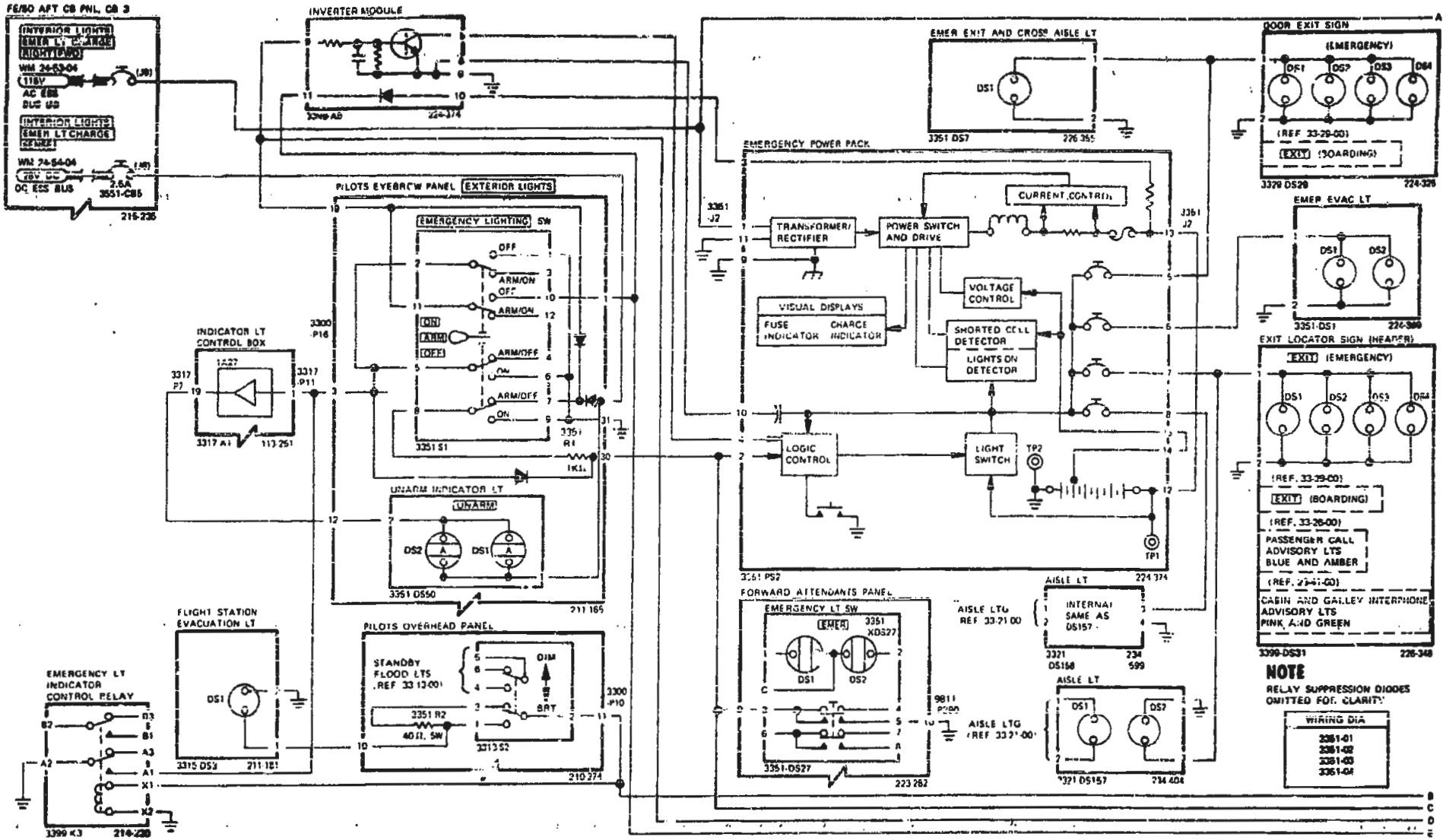
001B



R Emergency Lighting Schematic
R Figure 2 (Sheet 1)

EFFECTIVITY: 024-031 WITHOUT SB33-086

001B



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R
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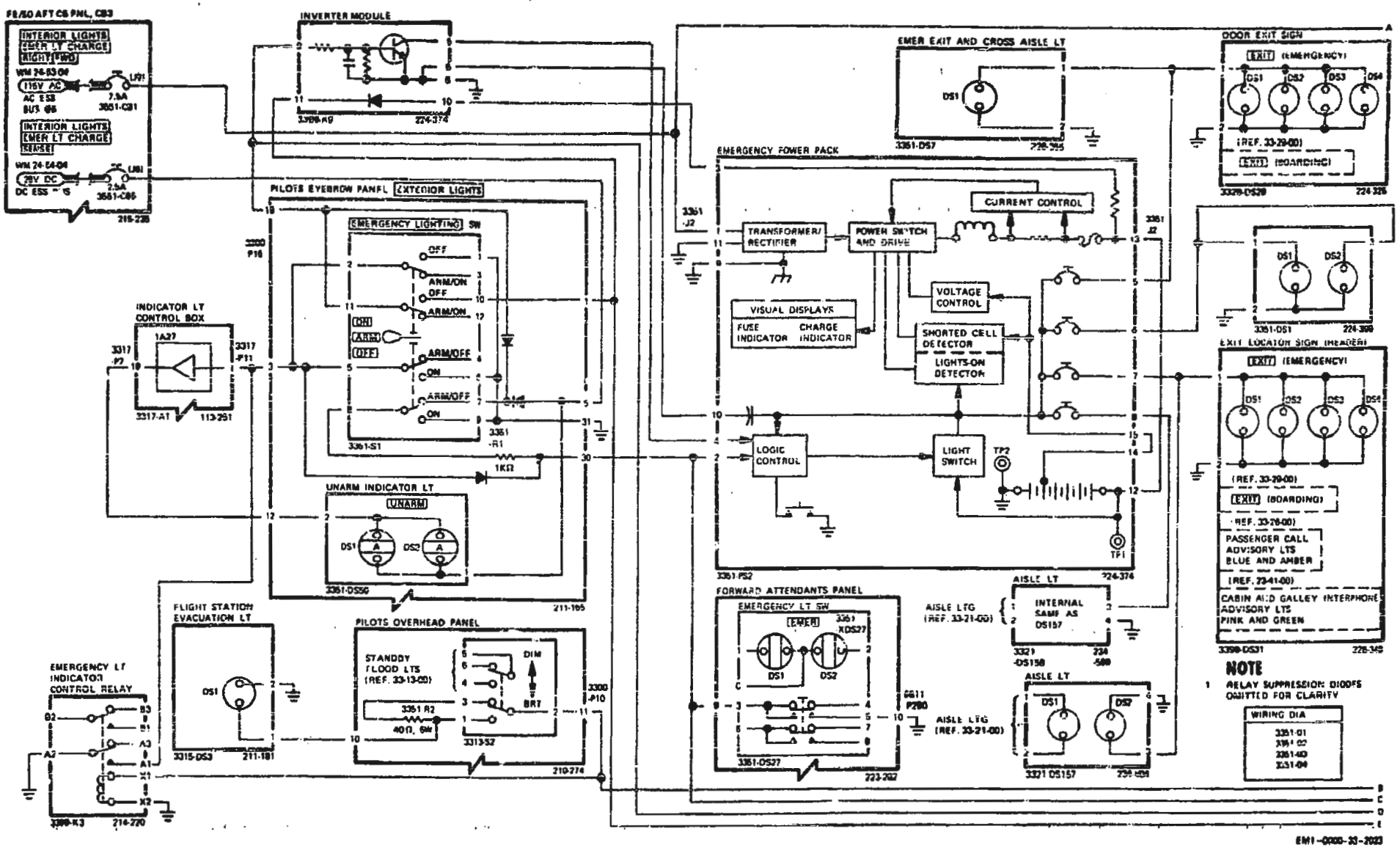
Emergency Lighting Schematic
Figure 2 (Sheet 1)

EFFECTIVITY: 001-023 WITH SB33-086

001B



R
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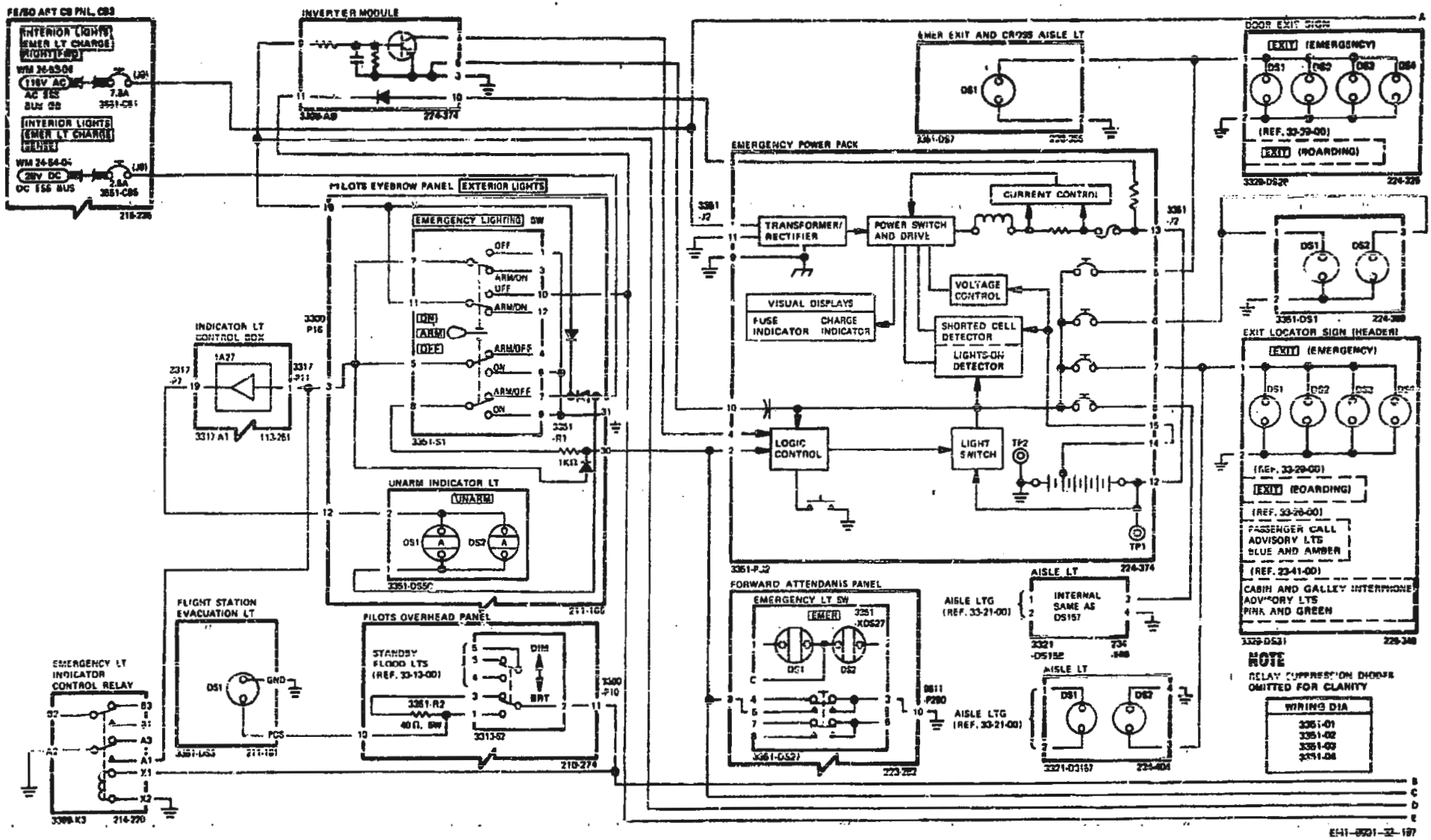
Emergency Lighting Schematic
Figure 2 (Sheet 1)

EFFECTIVITY: 024-031 WITH SB33-086



R
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Emergency Lighting Schematic
Figure 2 (Sheet 1)

EFFECTIVITY: 032-999

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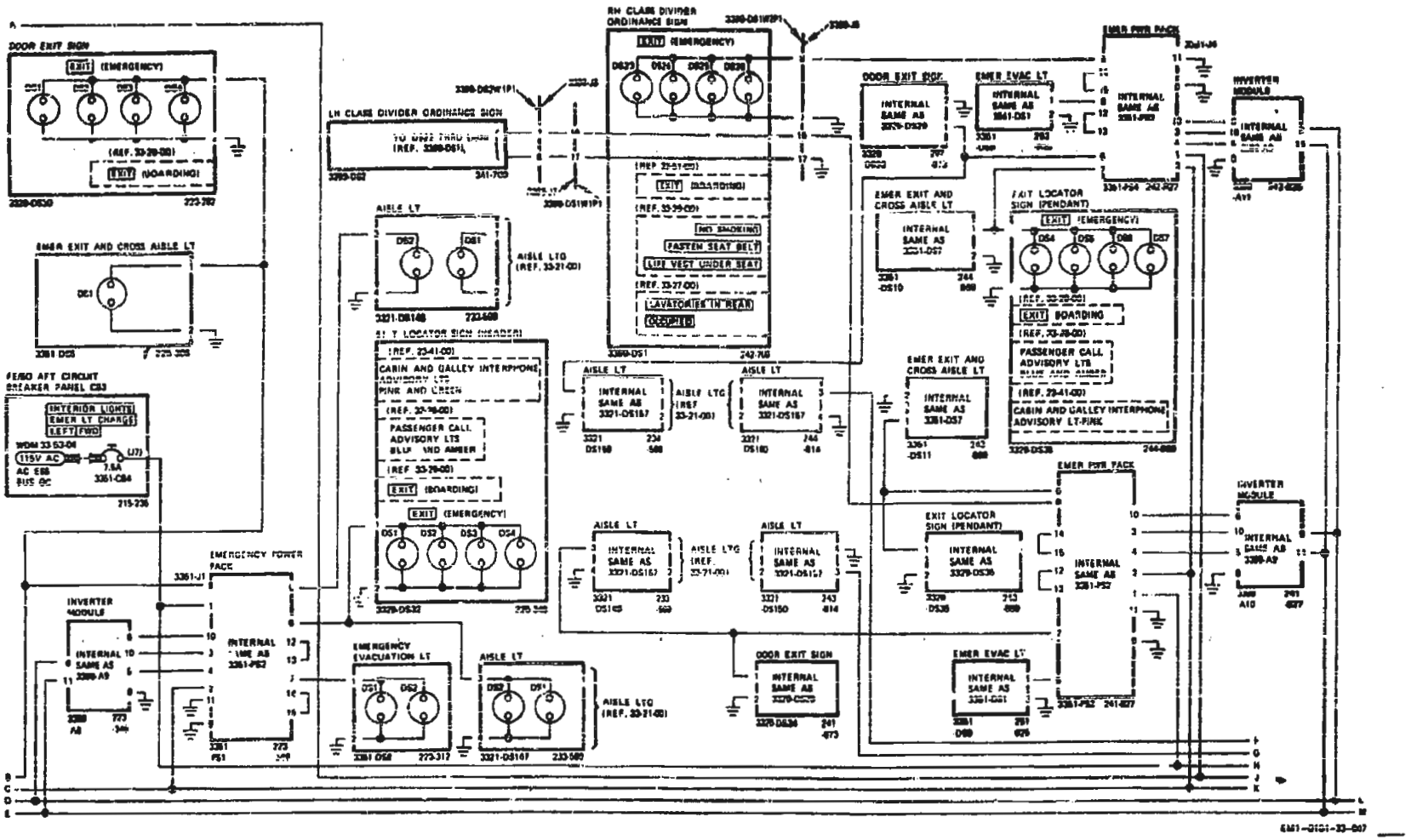

R Emergency Lighting Schematic
R Figure 2 (Sheet 2)

EFFECTIVITY: 001-023

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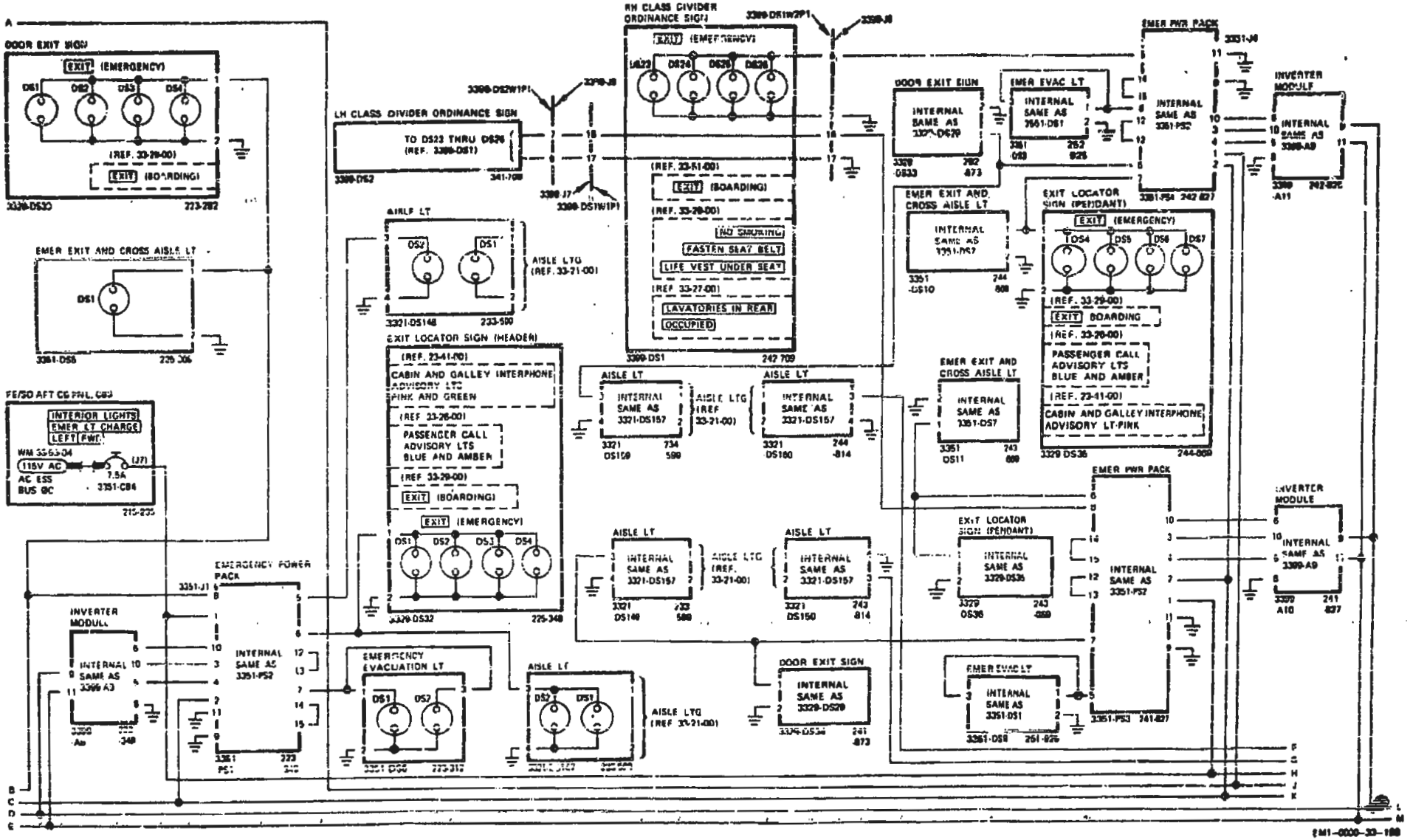
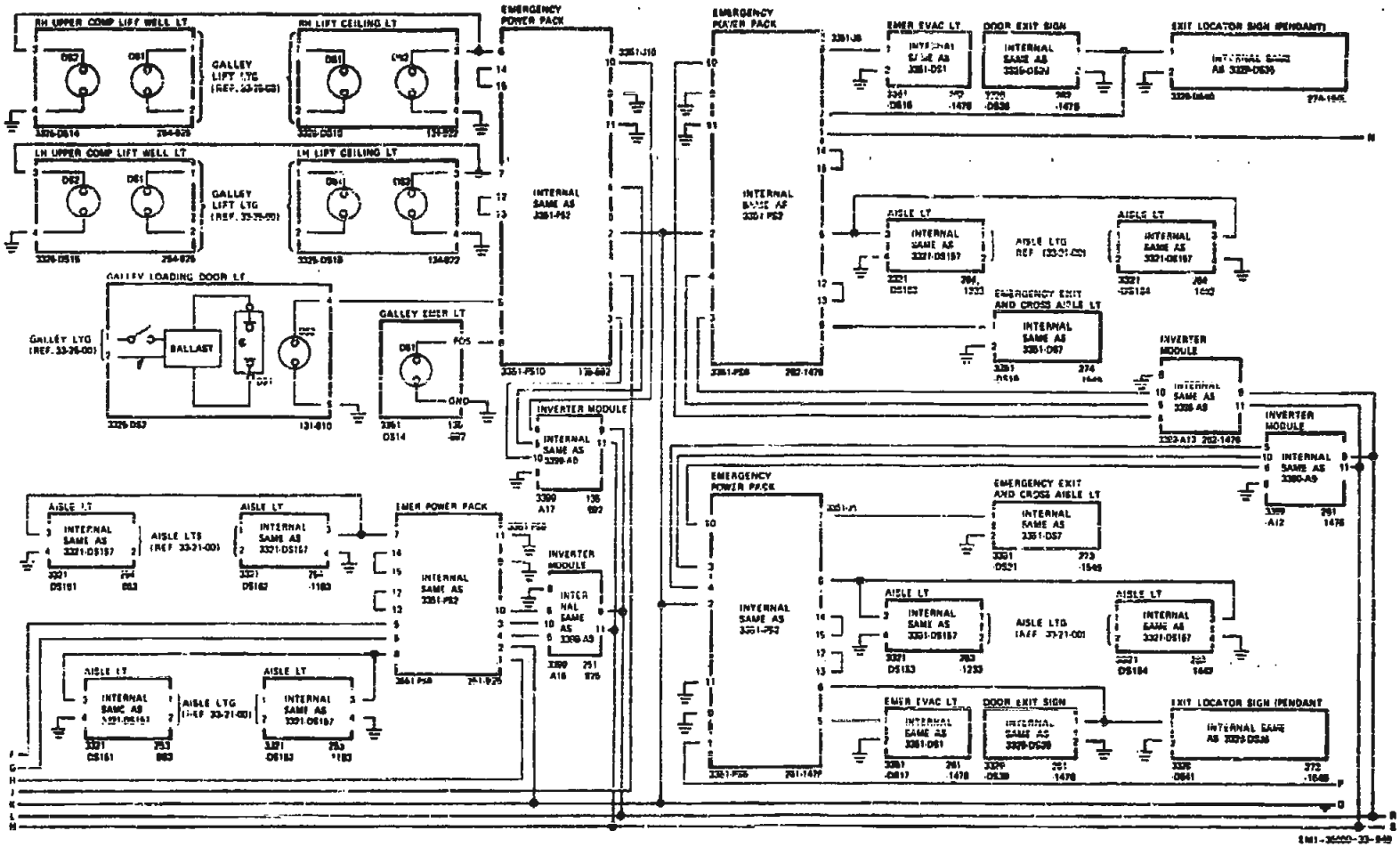


Emergency Lighting Schematic
Figure 2 (Sheet 2)

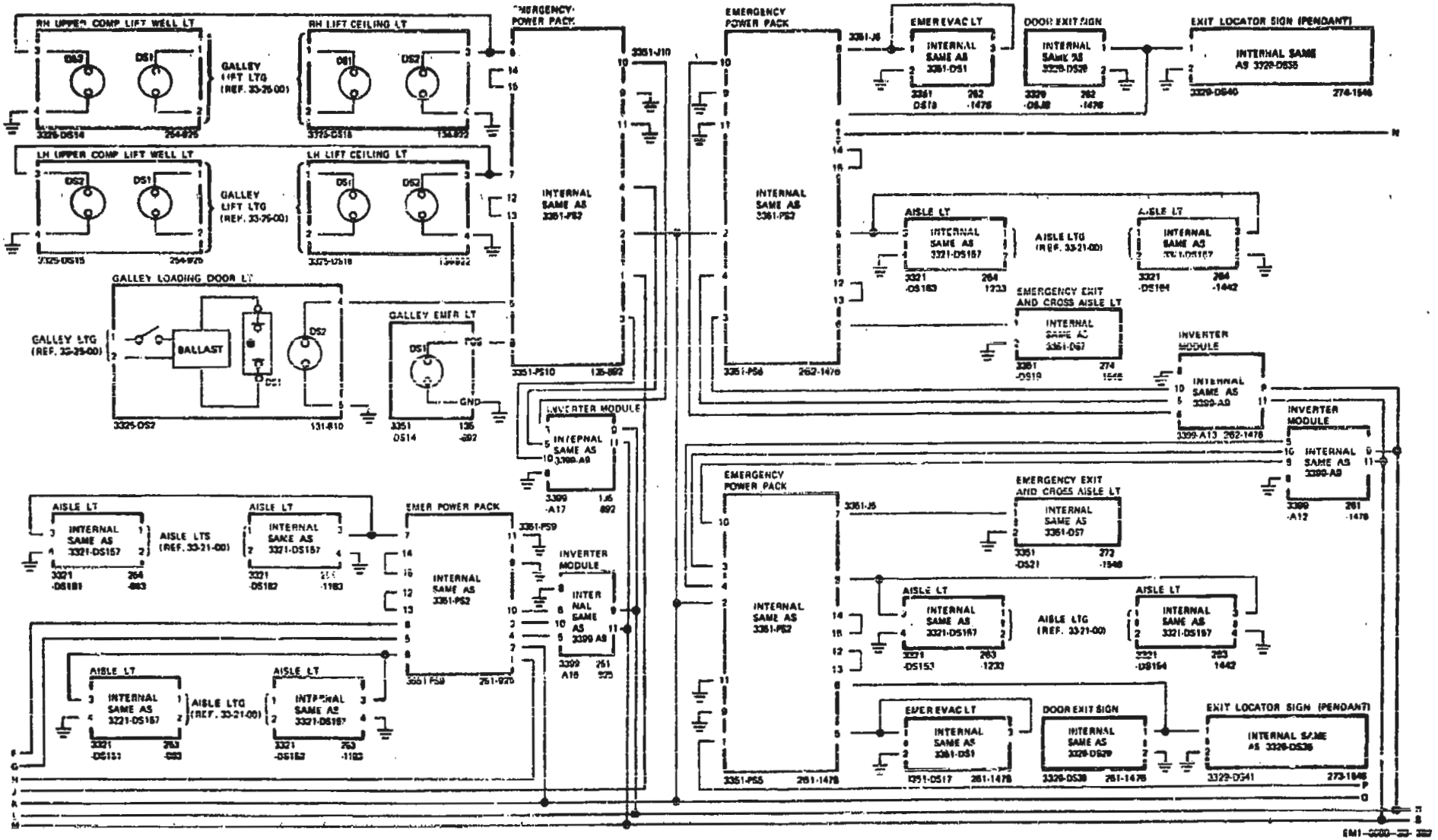
EFFECTIVITY: 024-999



R Emergency Lighting Schematic
R Figure 2 (Sheet 3)

EFFECTIVITY: 001-023

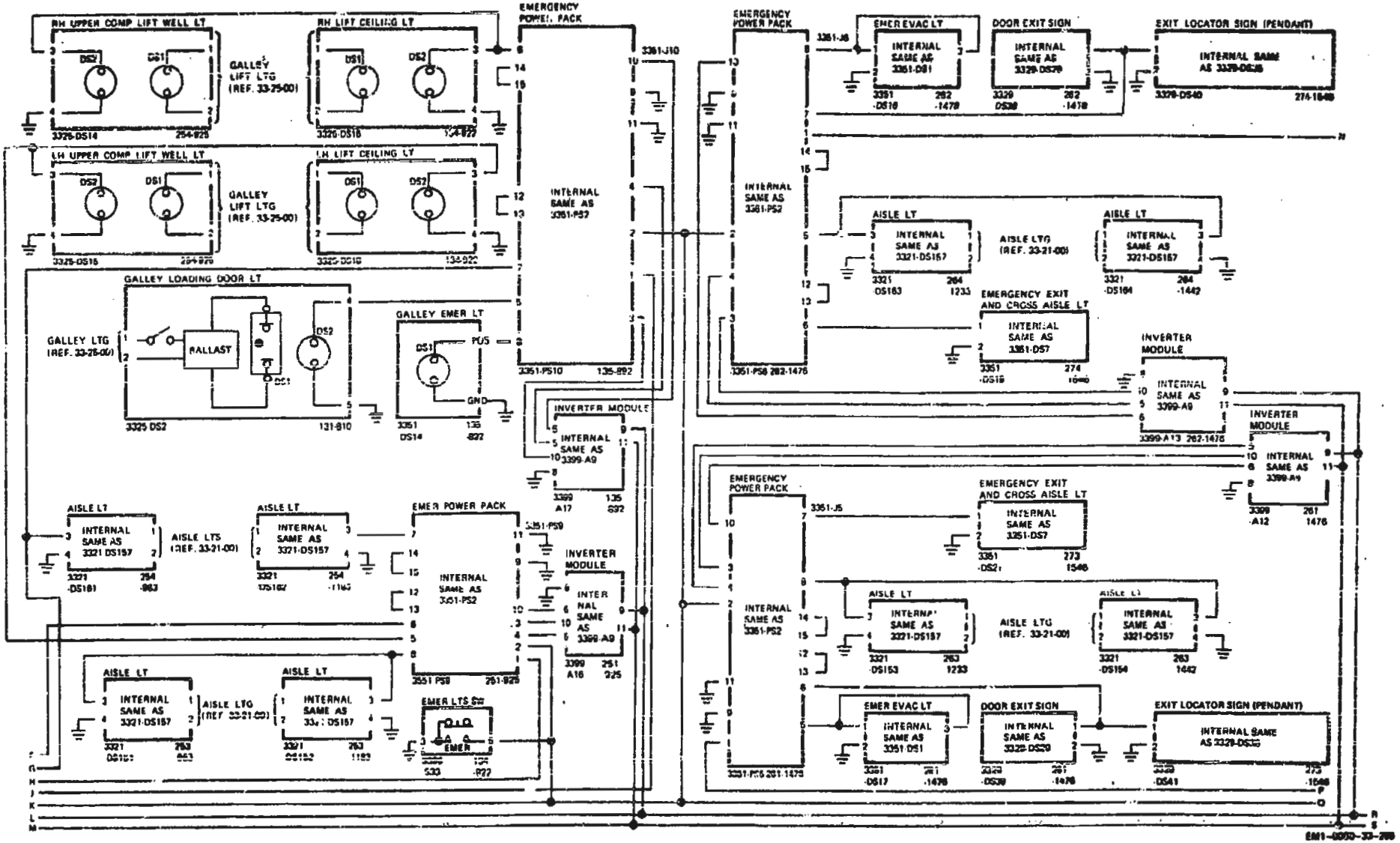
001B



R Emergency Lighting Schematic
R Figure 2 (Sheet 3)

EFFECTIVITY: 024-031

0018



R
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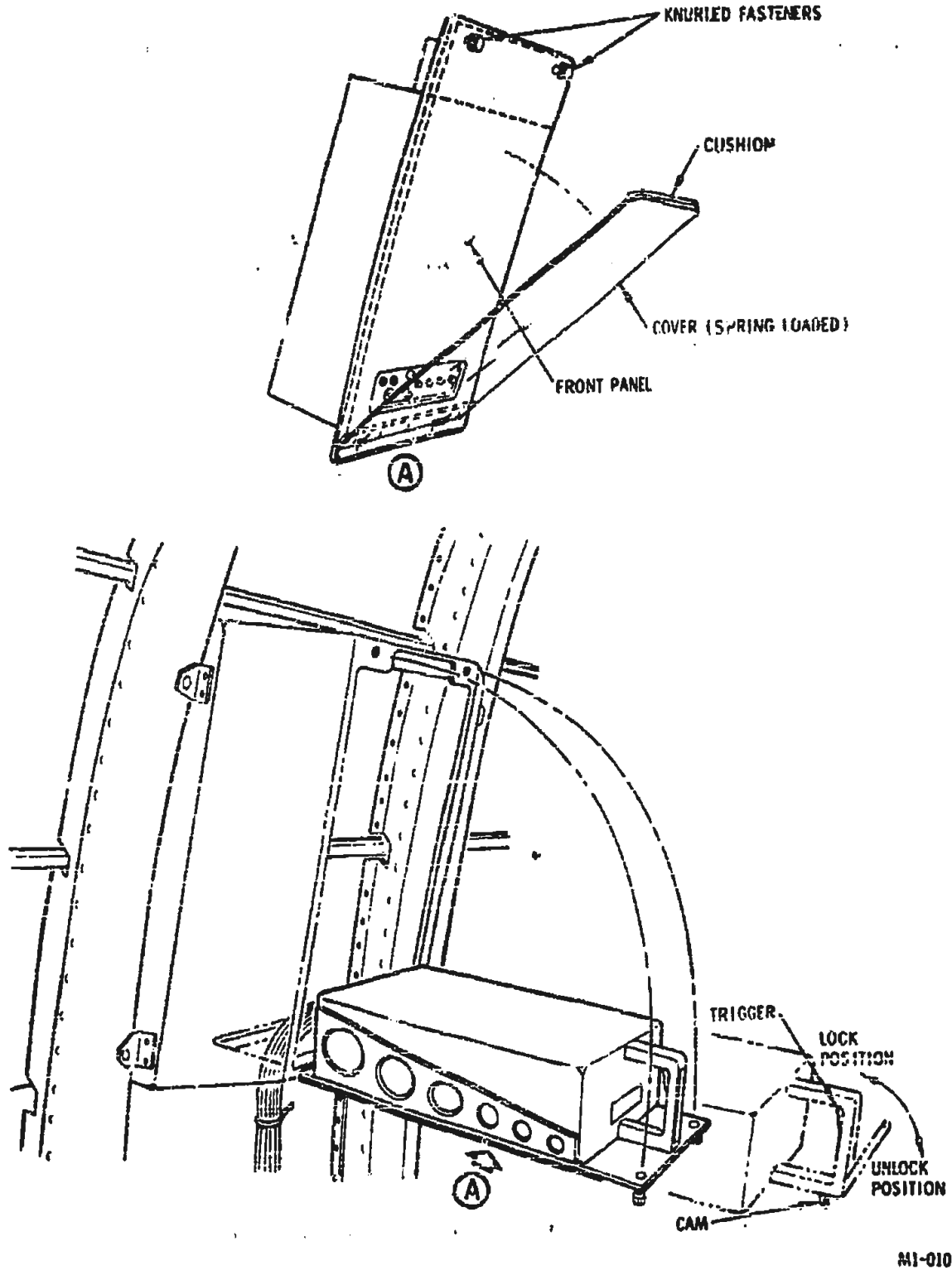
Emergency Lighting Schematic
Figure 2 (Sheet 3)

EFFECTIVITY: 032-999

001B



Emergency Power Pack
Figure 3

PILOTS EMERGENCY LIGHTING SWITCH	UNARM ANNUNC. LIGHT	CABIN ATTEND. SWITCH ACTUATED	AIRCRAFT POWER (AC & DC ESSENTIAL)	EMERGENCY LIGHTS	BATTERY CHARGING
1 OFF	ON	NO	ON	OFF	YES
2 ON	ON	(1)	ON	ON	NO
3 ARM	OFF	NO	ON	OFF	YES
4 OFF	ON (2)	NO	OFF	OFF	NO
5 ON	ON (2)	(1)	OFF	ON	NO
6 ARM	OFF	YES	OFF	ON	NO
7 OFF (3)	ON	YES	ON	ON (3)	NO
8 ON	ON	(1)	ON	ON	NO
9 ARM (4)	OFF	YES	ON	ON (4)	NO
10 OFF	ON (2)	YES	OFF	ON	NO
11 ON	ON (2)	(1)	OFF	ON	NO
12 ARM	OFF	YES	OFF	ON	NO

(1) CABIN ATTENDANT SWITCH POSITION HAS NO EFFECT ON LIGHTING MODE

(2) LIGHT WILL BE ON ONLY IF STANDBY POWER IS AVAILABLE

(3) SETTING SWITCH TO ARM THEN BACK TO OFF WILL TURN LIGHTS OFF

(4) SETTING EMERGENCY LIGHTING SWITCH TO OFF THEN BACK TO ARM WILL TURN LIGHTS OFF

IH 7775
M1-0100-33-224

Emergency Power Pack Switching Logic
Figure 4

5. Dual-purpose Lights

Dual-purpose lights incorporate two sets of lamps. The normal lamps are powered by the aircraft electrical system; the emergency incandescent lamps are powered by emergency power packs. The following are dual-purpose lights used both for normal and emergency lighting:

20 aisle lights (Ref. 33-21-00)

1 galley loading door light (Ref. 33-25-00)

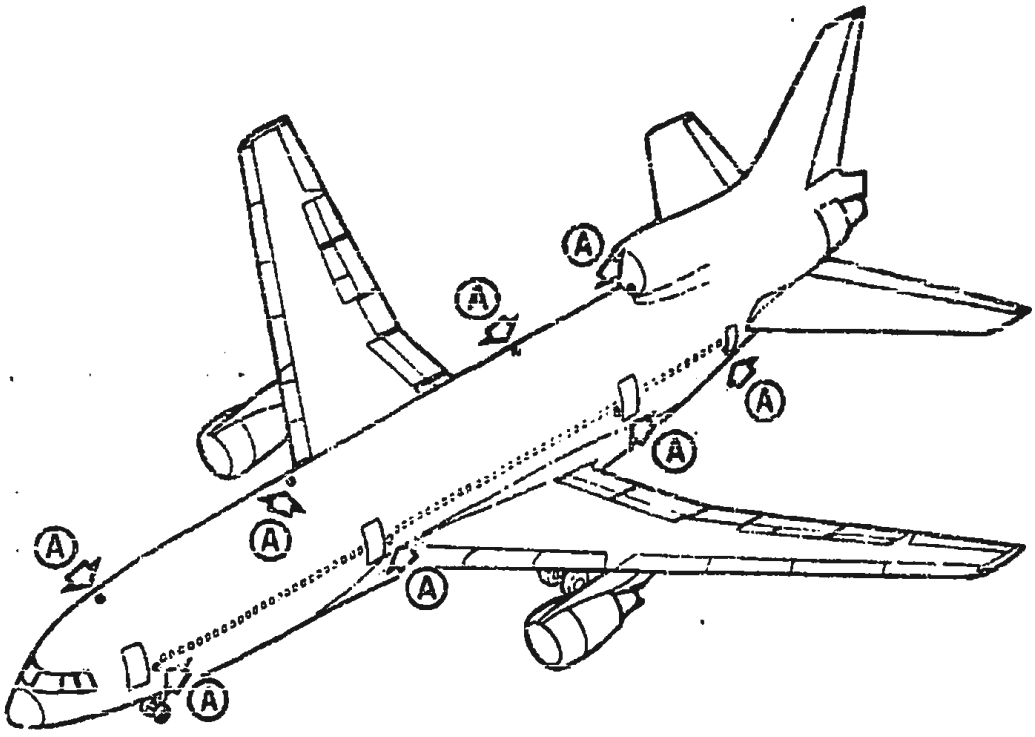
2 galley lift cage lights (Ref. 33-25-00)

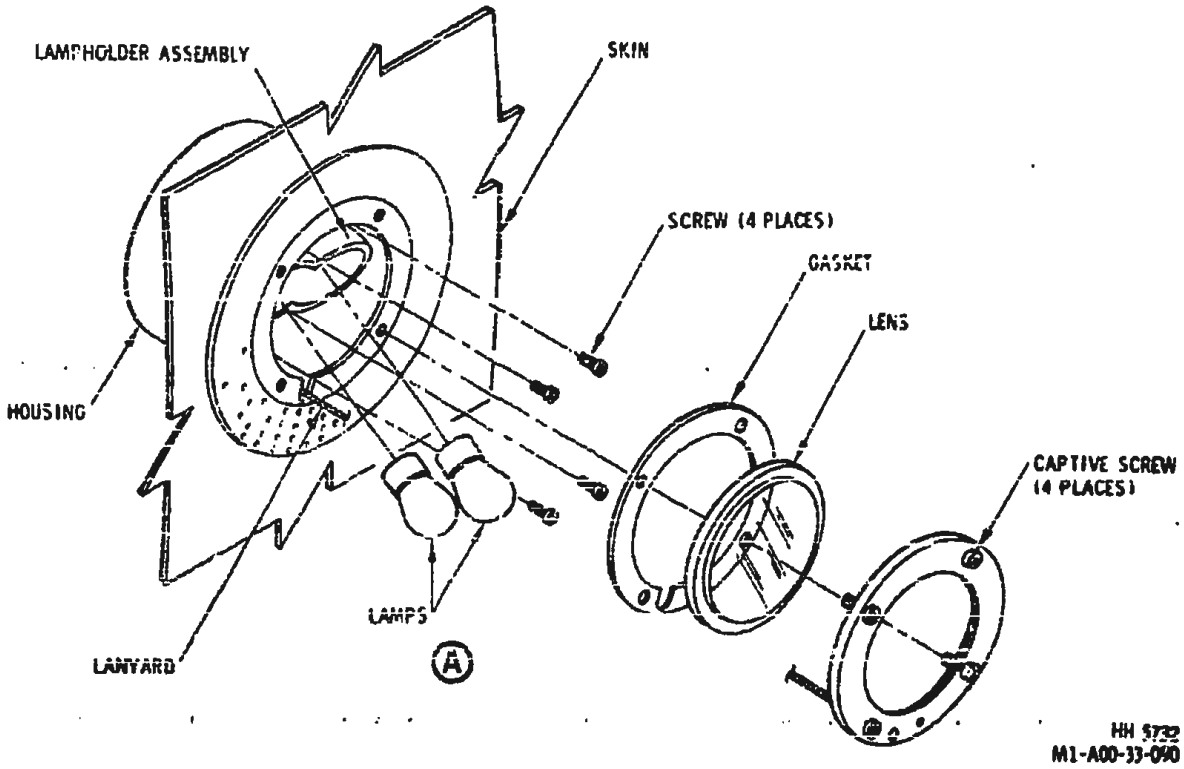
2 galley lift shaft lights (Ref. 33-25-00)

8 EXIT locator signs (Ref. 33-29-00)

2 EXIT legends on the class divider signs (Ref. 33-29-00)

8 door EXIT signs (Ref. 33-29-00)





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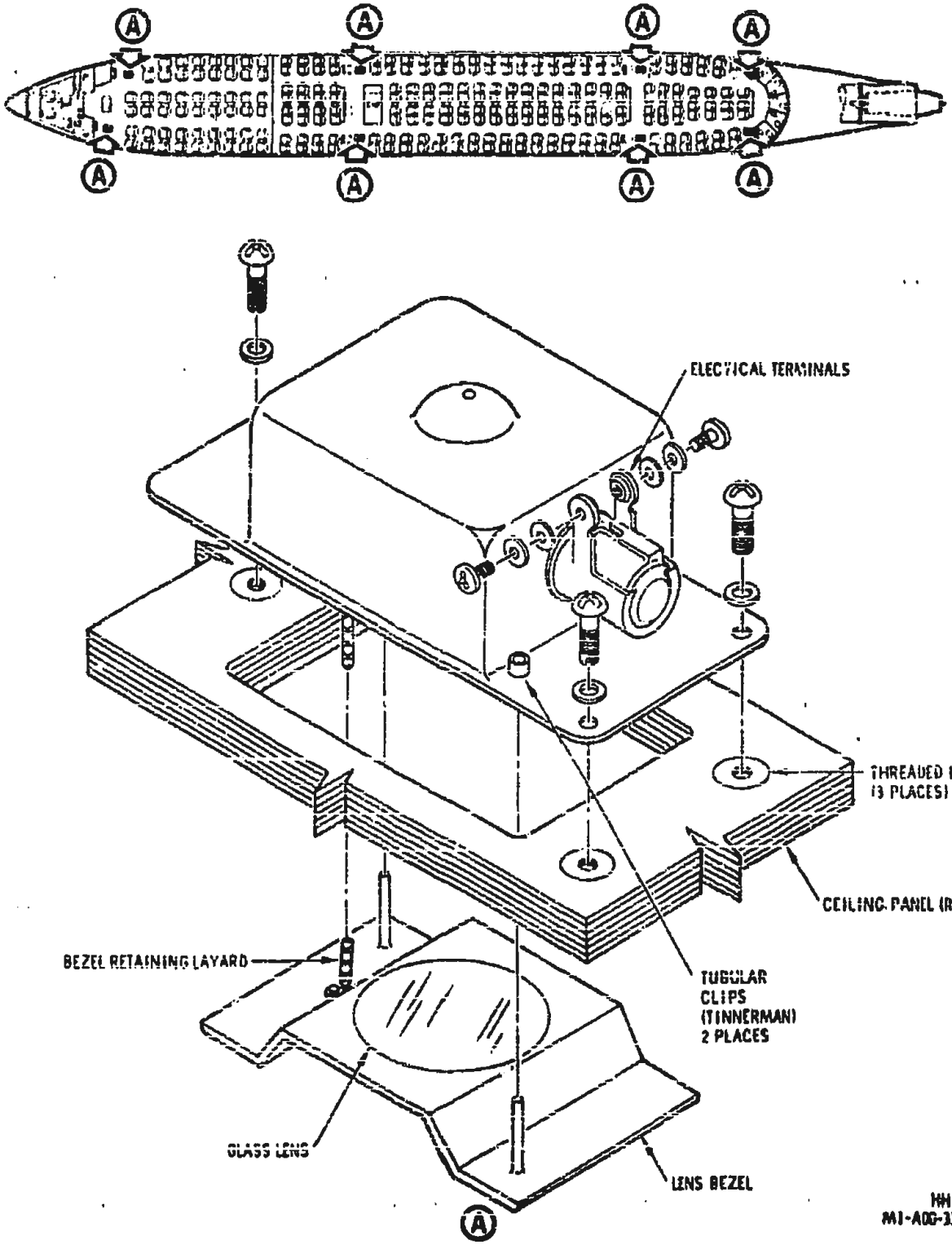
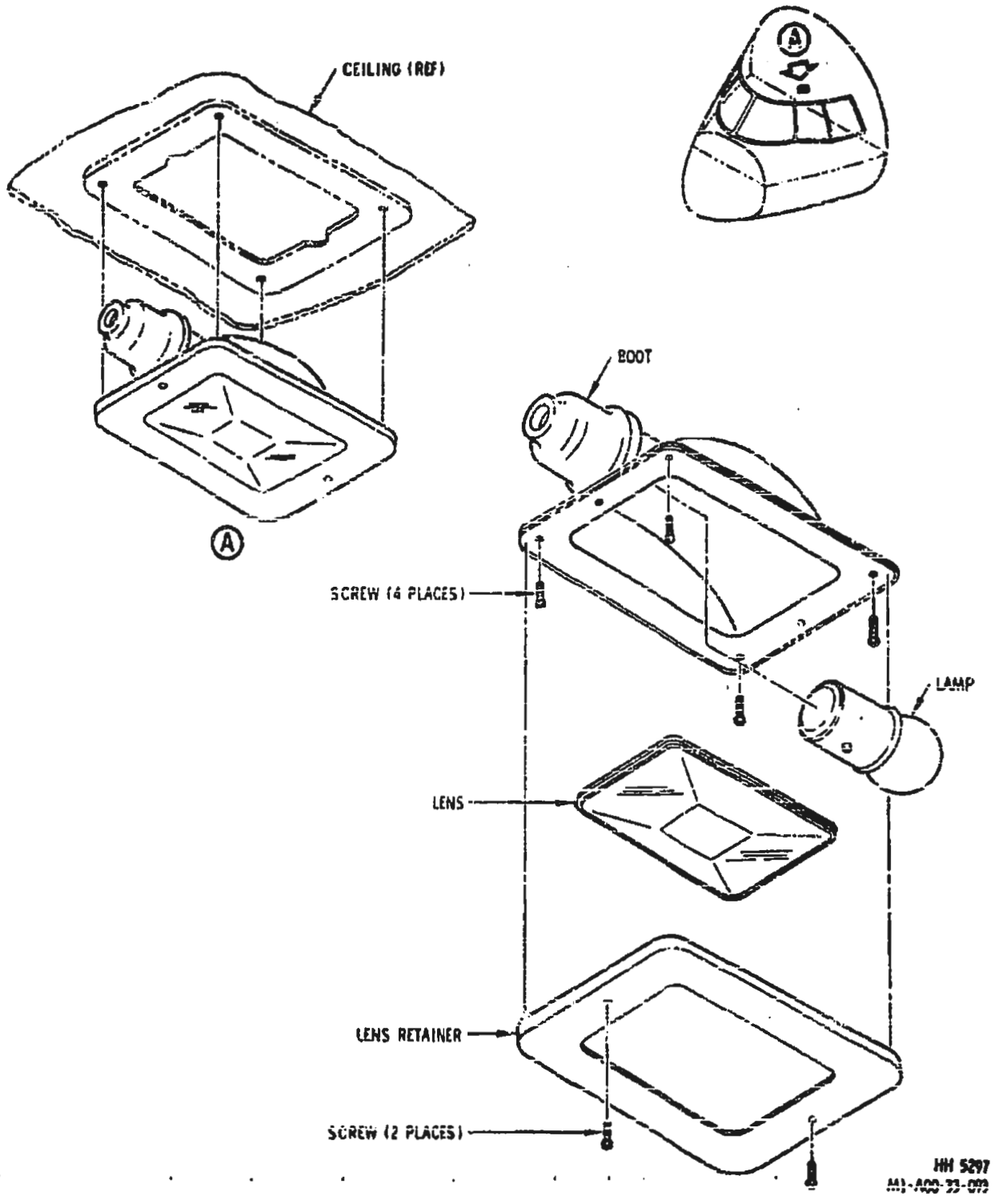
Emergency Evacuation Lights
Figure 5



Emergency Exit and Cross Aisle Light
Figure 6



Flight Station Emergency Light
Figure 7

EMERGENCY LIGHTING SYSTEM - FAULT ISOLATION

1. General

Reference data and fault isolation procedures for troubleshooting Emergency Lighting System faults are included in this section of the manual. An Emergency Lighting System malfunction detected by the flight crew is normally entered in the aircraft flight log book and reported to maintenance personnel by a FIRM fault code. This fault code and the flight log book report can be found in the Chapter 33 Fault Code Index. The index specifies the maintenance manual section, fault isolation diagram figure number and, where appropriate, a fault number indicating the diagram entry point containing the fault isolation procedure. When no fault number is specified, use schematic diagrams, identified by a SCHEM number, supplement fault isolation procedures as maintenance aids. The schematics show the basic system circuitry necessary for troubleshooting and include cross-reference indexes to the wiring manual pages required for checking component interconnect wiring.

2. Fault Isolation Identification

Table 101 is a list of the Emergency Lighting System fault isolation diagrams and schematics. Figure 101 and 102 provide component location for troubleshooting.

R CAUTION: REMOVAL OF THE PILOTS EYEBROW EMERGENCY LIGHTING PANEL
R WILL REMOVE THE DC BUS SENSING GROUND TO THE POWER
R PACKS. IF THE EMERGENCY LIGHTING PANEL IS TO BE
R REMOVED FOR MAINTENANCE, PULL ALL POWER PACK CIRCUIT
R BREAKERS, CB 1-4, TO PREVENT THE POWER PACK BATTERIES
R FROM DISCHARGING. RESET THE CIRCUIT BREAKERS AFTER
R REINSTALLATION OF THE EMERGENCY LIGHTING PANEL.

TABLE 101

FIGURE	TITLE
101	Component Location Index
102	Component Locator Diagram
103	Emergency Lighting System Fault Isolation
104	Power Pack Locations
SCHEM 1	Emergency Lighting System Schematic

COMPONENT	QTY	AREA/ACCESS	REFERENCE
CIRCUIT BREAKERS:			
EMER LT CHARGE – LEFT AFT 3351-CB3	1	FLT STA/CB3 J8	*
EMER LT CHARGE – LEFT FWD 3351-CB4	1	FLT STA/CB3 J7	*
EMER LT CHARGE – RIGHT AFT 3351-CB2	1	FLT STA/CB3 J10	*
EMER LT CHARGE – RIGHT FWD 3351-CB1	1	FLT STA/CB3 J9	*
EMER LT CHARGE – SENSE 3351-CB5	1	FLT STA/CB3 J6	*
EMER UNARM IND 3351-CB6 (1)	1	FLT STA/CB1 K14	*
LIGHT – EMERGENCY AISLE	20	CEILING MOUNTED ABOVE THE LONGITUDINAL AISLES	33-21-01
LIGHT – EMERGENCY EVACUATION SLIDE	3	FUSELAGE EXTERIOR ADJACENT TO THE PASSENGER DOORS	33-51-02
LIGHT – EMERGENCY EXIT AND CROSS AISLE	8	CEILING MOUNTED ADJACENT TO THE PASSENGER DOORS	33-51-04
LIGHT – FLT STA EMERGENCY EVACUATION	1	FLT STA CEILING MOUNTED	33-51-08
LIGHT – GALLEY EMERGENCY	1	GALLEY CEILING	33-51-16
LIGHT – GALLEY LIFT	2	ONE IN THE CEILING OF EACH GALLEY LIFT	33-25-02
LIGHT – GALLEY LIFT SHAFT	2	ONE ABOVE EACH LIFT SHAFT	33-25-04
LIGHT – GALLEY LOADING DOOR	1	AFT OF THE GALLEY LOADING DOOR WALL MOUNTED	33-25-10
MODULE – INVERTER	3	OUTBD OVHD STOWAGE MODULES ADJACENT TO THE PASSENGER DOORS	20-24-02
MODULE – INVERTER	1	MID CABIN SERVICE CENTER RH CABINET	20-24-02
MODULE – INVERTER	1	GALLEY CEILING	20-24-02
PACK – EMERGENCY POWER	6	OUTBD OVHD STOWAGE MODULES ADJACENT TO THE PASSENGER DOORS	33-51-03
PACK – EMERGENCY POWER	1	MID CABIN SERVICE CENTER RH CABINET	33-51-03
PACK – EMERGENCY POWER	1	GALLEY CEILING	33-51-03

(1) NOTE
AIRCRAFT 001-031 WITHOUT SB 33-066

*SEE WM EQUIPMENT LIST

M1-0000-33-1648

R Component Location Index
R Figure 101 (Sheet 1)

EFFECTIVITY: ALL

001B

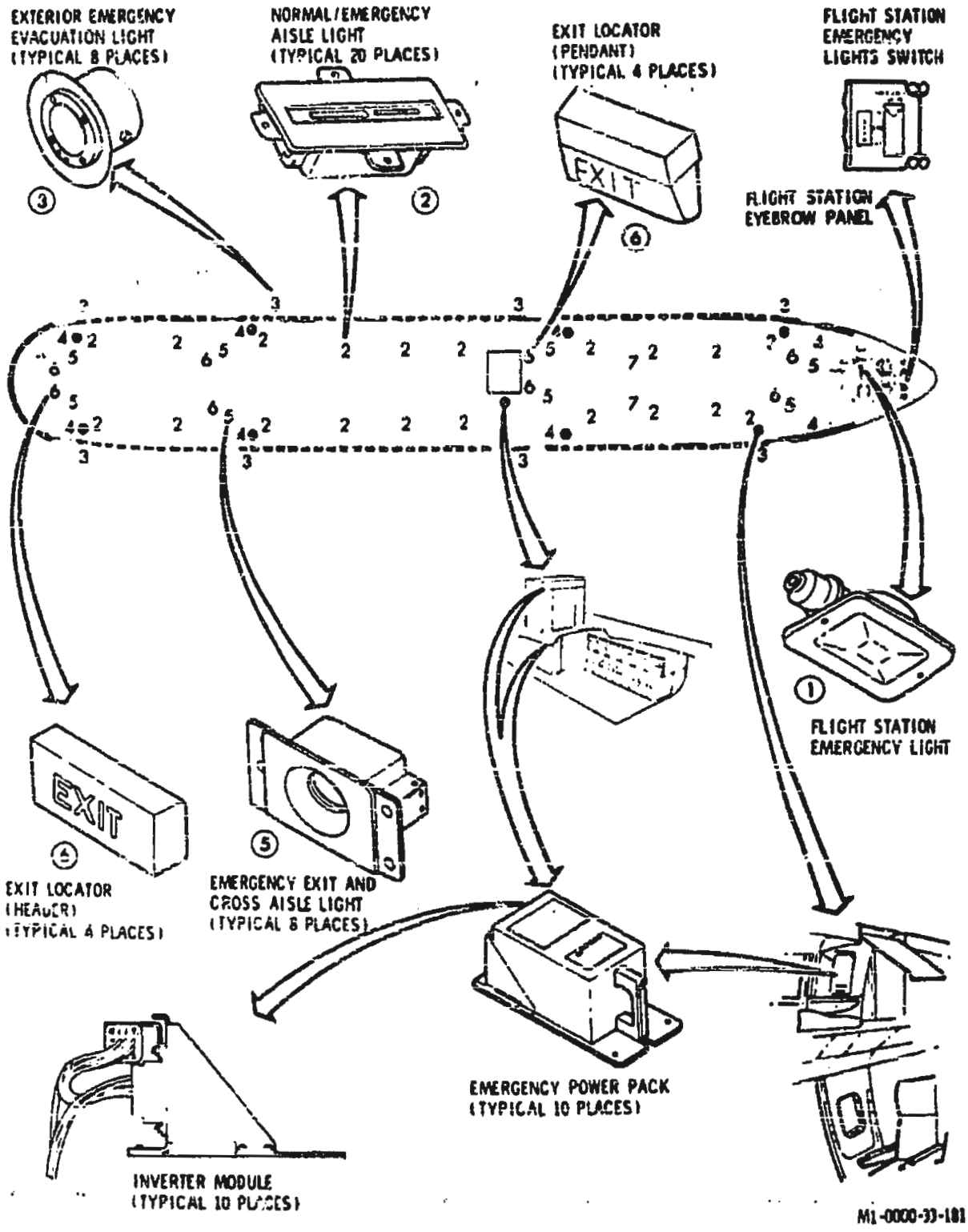
COMPONENT	QTY	AREA/ACCESS	REFERENCE
SIGN – CLASS DIVIDER EXIT	2	BETWEEN FIRST CLASS AND COACH CABINS CEILING MOUNTED	33-28-11
SIGN – DOOR EXIT	8	ADJACENT TO THE PASSENGER DOORS WALL MOUNTED	33-28-14
SIGN – EXIT LOCATOR (HEADER)	2	FWD CABIN LH AND RH WALL MOUNTED	33-28-10
SIGN – EXIT LOCATOR (HEADER)	2	AFT CABIN LH AND RH WALL MOUNTED	33-28-10
SIGN – EXIT LOCATOR (PENDANT)	2	CROSS AISLE BETWEEN THE L2 AND R2 DOORS CEILING MOUNTED	33-28-13
SIGN – EXIT LOCATOR (PENDANT)	2	CROSS AISLE BETWEEN THE L3 AND R3 DOORS CEILING MOUNTED	33-28-13
SWITCH – AFT CABIN ATTENDANT EMERGENCY LIGHTS	1	LH AFT CABIN ATTENDANT LIGHTS CONTROL PANEL	20-33-02
SWITCH – FLIGHT STATION EMERGENCY LIGHTS	1	FLIGHT STATION PILOTS EYEBROW PANEL	20-24-01
SWITCH – FWD CABIN ATTENDANT EMERGENCY LIGHTS	1	LH FWD CABIN ATTENDANT LIGHTS CONTROL PANEL	20-23-02
SWITCH – GALLEY EMERGENCY LIGHTS (IF INSTALLED)	1	GALLEY INTERCOM PANEL	20-33-02

M1-0000-33-1864

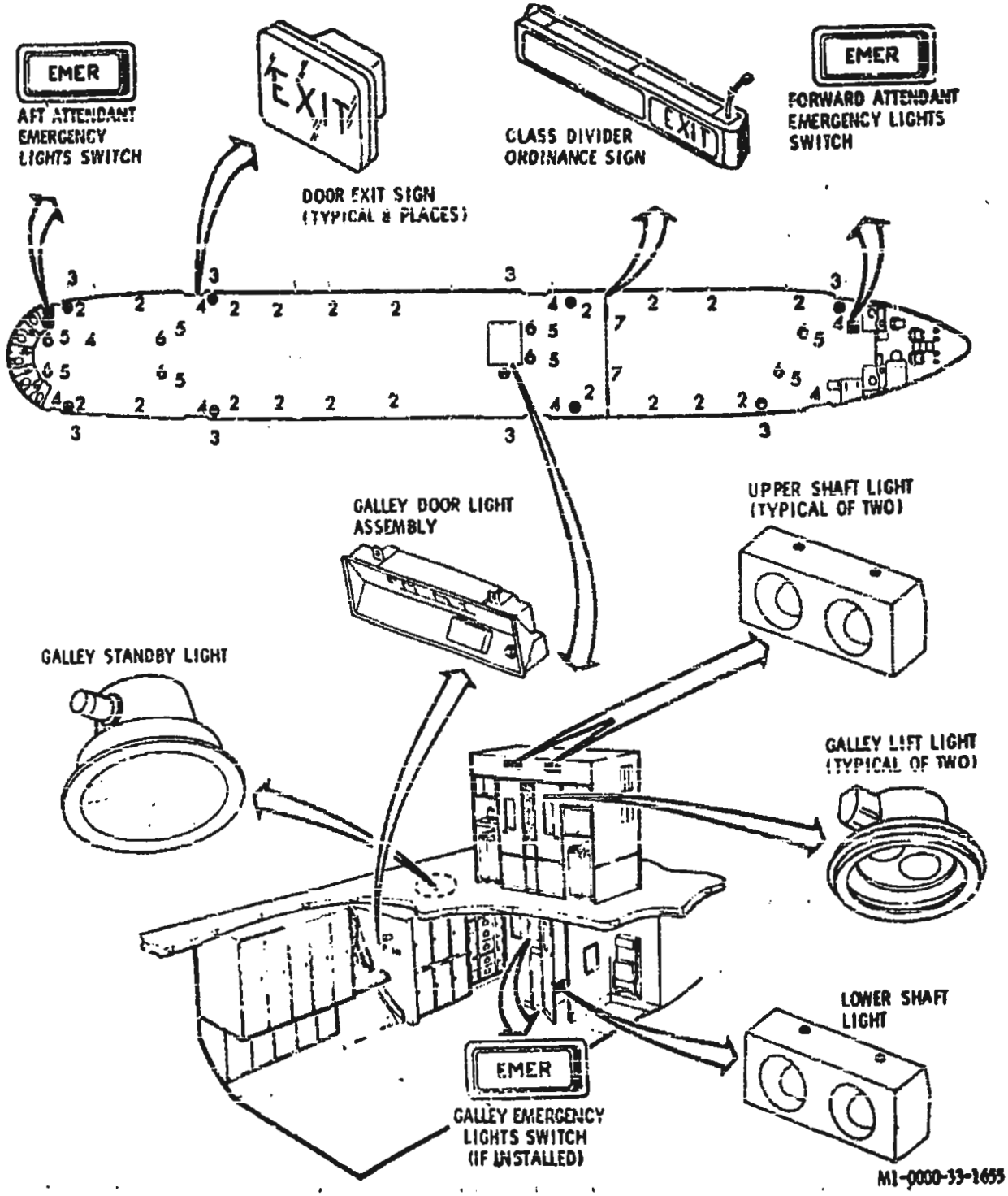
R Component Location Index
R Figure 101 (Sheet 2)

EFFECTIVITY: ALL

0018


EXTERIOR EMERGENCY EVACUATION LIGHT (TYPICAL 8 PLACES)
NORMAL/EMERGENCY AISLE LIGHT (TYPICAL 20 PLACES)
EXIT LOCATOR (PENDANT) (TYPICAL 4 PLACES)
FLIGHT STATION EMERGENCY LIGHTS SWITCH
FLIGHT STATION EYEBROW PANEL
EXIT
FLIGHT STATION EMERGENCY LIGHT
EXIT LOCATOR (HEADER) (TYPICAL 4 PLACES)
EMERGENCY EXIT AND CROSS AISLE LIGHT (TYPICAL 8 PLACES)
EMERGENCY POWER PACK (TYPICAL 10 PLACES)
INVERTER MODULE (TYPICAL 10 PLACES)
M1-0000-33-181

Component Locator Diagram
Figure 102 (Sheet 1)



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R

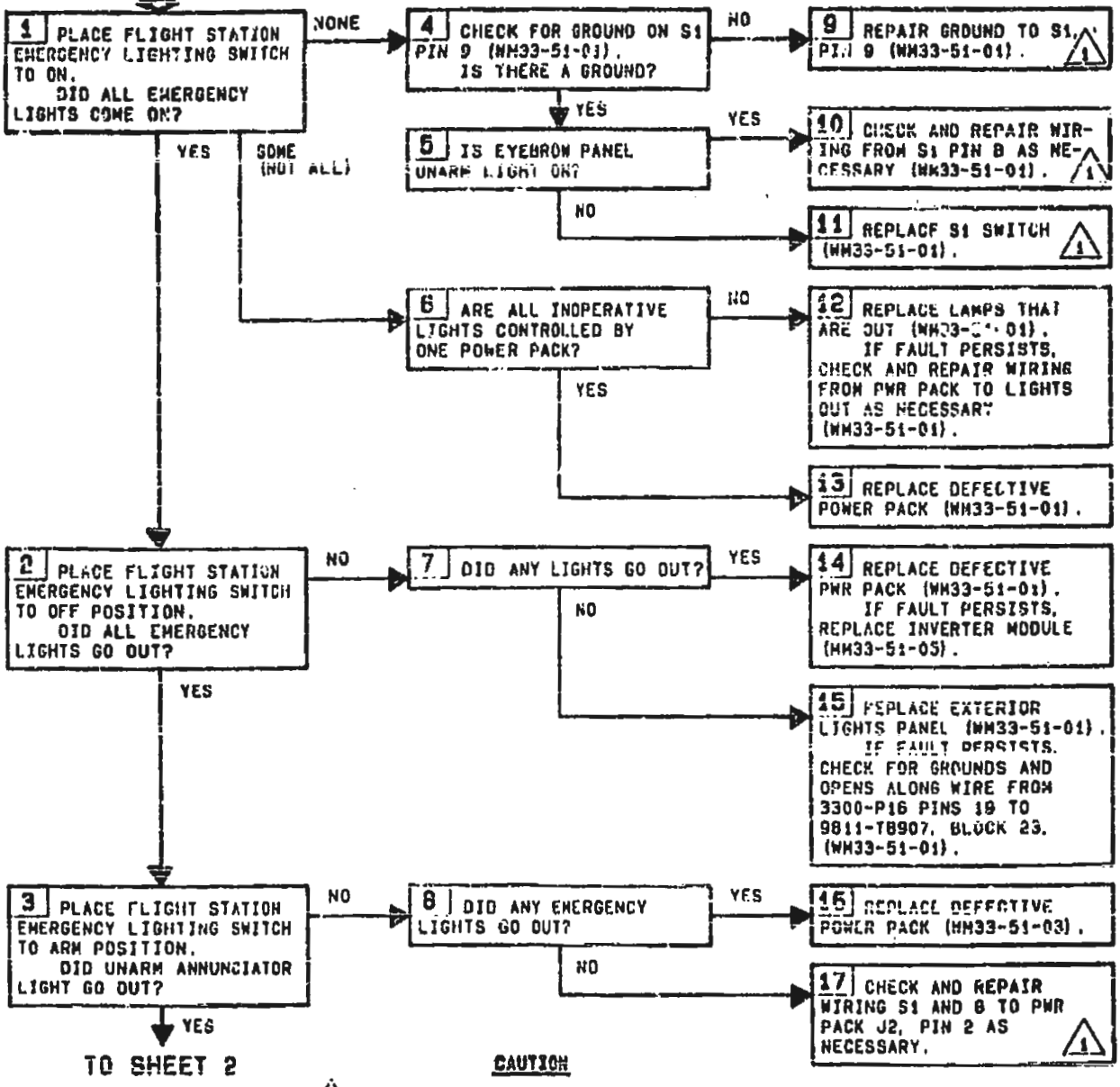
Component Locator Diagram
Figure 102 (Sheet 2)

EFFECTIVITY: ALL

001B

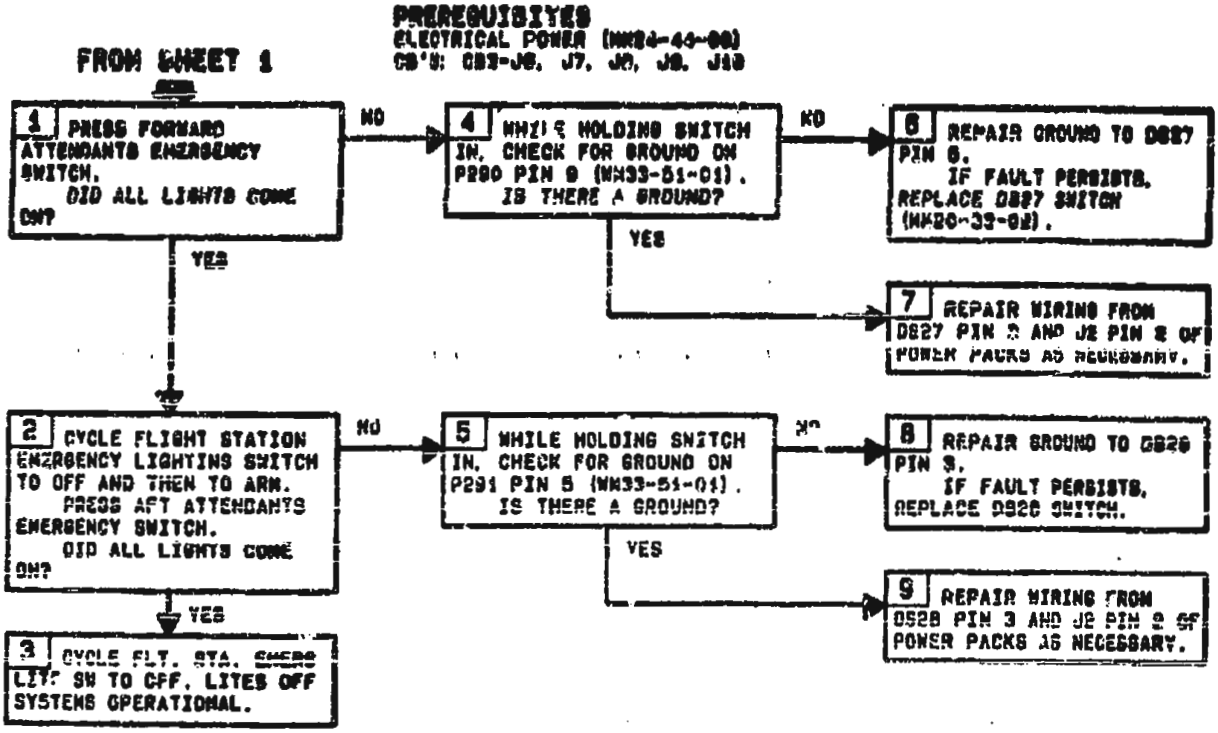
PREREQUISITES
ELECTRICAL POWER (MM24-44-00)
CB'S: CB-3J6, J7, J8, J9, J10

EMERGENCY LIGHTING FAULT ISOLATION CHECKOUT


1 PLACE FLIGHT STATION EMERGENCY LIGHTING SWITCH TO ON. DID ALL EMERGENCY LIGHTS COME ON?
NONE
SOME (NOT ALL)
YES
4 CHECK FOR GROUND ON S1 PIN 9 (MM33-51-01). IS THERE A GROUND?
NO
9 REPAIR GROUND TO S1, PIN 9 (MM33-51-01). 1
YES
5 IS EYEBROW PANEL UNARM LIGHT ON?
YES
10 CHECK AND REPAIR WIRING FROM S1 PIN B AS NECESSARY (MM33-51-01). 1
NO
11 REPLACE S1 SWITCH (MM33-51-01). 1
6 ARE ALL INOPERATIVE LIGHTS CONTROLLED BY ONE POWER PACK?
NO
12 REPLACE LAMPS THAT ARE OUT (MM33-51-01). IF FAULT PERSISTS, CHECK AND REPAIR WIRING FROM PWR PACK TO LIGHTS OUT AS NECESSARY (MM33-51-01).
YES
13 REPLACE DEFECTIVE POWER PACK (MM33-51-01).
2 PLACE FLIGHT STATION EMERGENCY LIGHTING SWITCH TO OFF POSITION. DID ALL EMERGENCY LIGHTS GO OUT?
NO
7 DID ANY LIGHTS GO OUT?
YES
14 REPLACE DEFECTIVE PWR PACK (MM33-51-01). IF FAULT PERSISTS, REPLACE INVERTER MODULE (MM33-51-05).
NO
15 REPLACE EXTERIOR LIGHTS PANEL (MM33-51-01). IF FAULT PERSISTS, CHECK FOR GROUNDS AND OPENS ALONG WIRE FROM 3300-P16 PINS 19 TO 9811-T8907, BLOCK 23. (MM33-51-01).
YES
3 PLACE FLIGHT STATION EMERGENCY LIGHTING SWITCH TO ARM POSITION. DID UNARM ANNUNCIATOR LIGHT GO OUT?
NO
8 DID ANY EMERGENCY LIGHTS GO OUT?
YES
16 REPLACE DEFECTIVE POWER PACK (MM33-51-03).
NO
17 CHECK AND REPAIR WIRING S1 AND 8 TO PWR PACK J2, PIN 2 AS NECESSARY. 1
YES
TO SHEET 2
CAUTION
1 PULL ALL POWER PACK CIRCUIT BREAKERS (CB1-4) BEFORE REMOVAL OF EMERGENCY LIGHTS PANEL TO PREVENT POWER PACK BATTERY DISCHARGING. RESET CIRCUIT BREAKERS AFTER REINSTALLTION OF THE EMERGENCY LIGHTS PANEL.
M1-0002-33-2028

R Emergency Lighting System Fault Isolation
R Figure 103 (Sheet 1)

EFFECTIVITY: 001-031 WITH SB33-086 AND 032-999

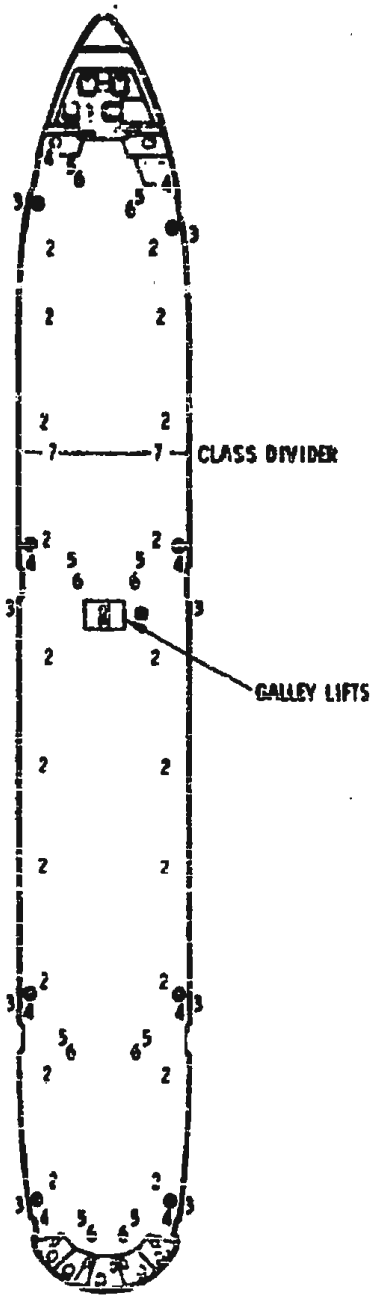

PREREQUISITES
ELECTRICAL POWER (MM24-44-00)
CB'S: C83-J6, J7, J8, J9, J10
FROM SHEET 1
1 PRESS FORWARD ATTENDANTS EMERGENCY SWITCH. DID ALL LIGHTS COME ON?
NO
4 WHILE HOLDING SWITCH IN, CHECK FOR GROUND ON P280 PIN 9 (MM33-51-01). IS THERE A GROUND?
NO
6 REPAIR GROUND TO D827 PIN 6. IF FAULT PERSISTS, REPLACE D827 SWITCH (MM26-33-02).
YES
7 REPAIR WIRING FROM D827 PIN 3 AND J2 PIN E OF POWER PACKS AS NECESSARY.
YES
2 CYCLE FLIGHT STATION EMERGENCY LIGHTING SWITCH TO OFF AND THEN TO ARM. PRESS AFT ATTENDANTS EMERGENCY SWITCH. DID ALL LIGHTS COME ON?
NO
5 WHILE HOLDING SWITCH IN, CHECK FOR GROUND ON P291 PIN 5 (MM33-51-01). IS THERE A GROUND?
NO
8 REPAIR GROUND TO D826 PIN 3. IF FAULT PERSISTS, REPLACE D826 SWITCH.
YES
9 REPAIR WIRING FROM D826 PIN 3 AND J2 PIN E OF POWER PACKS AS NECESSARY.
YES
3 CYCLE FLT. STA. EMERG LIT. SW TO OFF. LITES OFF SYSTEMS OPERATIONAL.

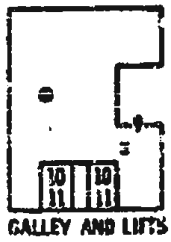
HI-0001-33-2027

R
R Emergency Lighting System Fault Isolation
Figure 103 (Sheet 2)

EFFECTIVITY: 001-031 WITH SB33-086
AND 032-999

001B





- EMERGENCY POWER PACK
- 1 FLIGHT STATION EMERGENCY LIGHT
- 2 EMERGENCY AISLE LIGHT
- 3 EMERGENCY EVACUATION LIGHT
- 4 EXIT SIGN
- 5 EXIT LOCATOR SIGN
- 6 EMERGENCY EXIT AND CROSS AISLE LIGHT
- 7 CLASS DIVIDER EXIT SIGN
- 8 GALLEY EMERGENCY LIGHT
- 9 GALLEY DOOR LIGHT
- 10 LIFT CAGE LIGHT
- 11 LIFT SHAFT LIGHT

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M1-0100-33-202

Emergency Light and Power Pack Locations
Figure 104 (Sheet 1)

POWER PACK NO.	POWER PACK LOCATION	EMERGENCY LIGHTS: FLIGHT STATION EMERGENCY LIGHT	EXIT LOCATOR SIGN	EXIT SIGN (WALL)	EMERGENCY EXIT & CROSS AISLE LIGHT	EMERGENCY EVACUATION LIGHT	EMERGENCY AISLE LIGHT	CLASS DIVIDER EXIT SIGN	LIFT CAGE LIGHT	LIFT SHAFT LIGHT	GALLEY LOADING DOOR LIGHT	GALLEY EMERGENCY LIGHT	
1	FORWARD LH PASSENGER DOOR (L-1)	1	1	1	1	1	2						
2	FORWARD RH PASSENGER DOOR (R-1)		1	1	1	1	2						
3	CENTER LH PASSENGER DOOR (L-2)		1	1	1	1	1	1					
4	CENTER RH PASSENGER DOOR (R-2)		1	1	1	1	1	1					
5	AFT LH PASSENGER DOOR (L-3)		1	1	1	1	2						
6	AFT RH PASSENGER DOOR (R-3)		1	1	1	1	2						
7	AFT LH EMERGENCY DOOR (L-4)		1	1	1	1	2						
8	AFT RH EMERGENCY DOOR (R-4)		1	1	1	1	2						
9 (1)	CENTER CABIN						4		1	1			
9 (2)	CENTER CABIN						6						
10 (1)	GALLEY						2		1	1	1	1	
10 (2)	GALLEY								2	2	1	1	

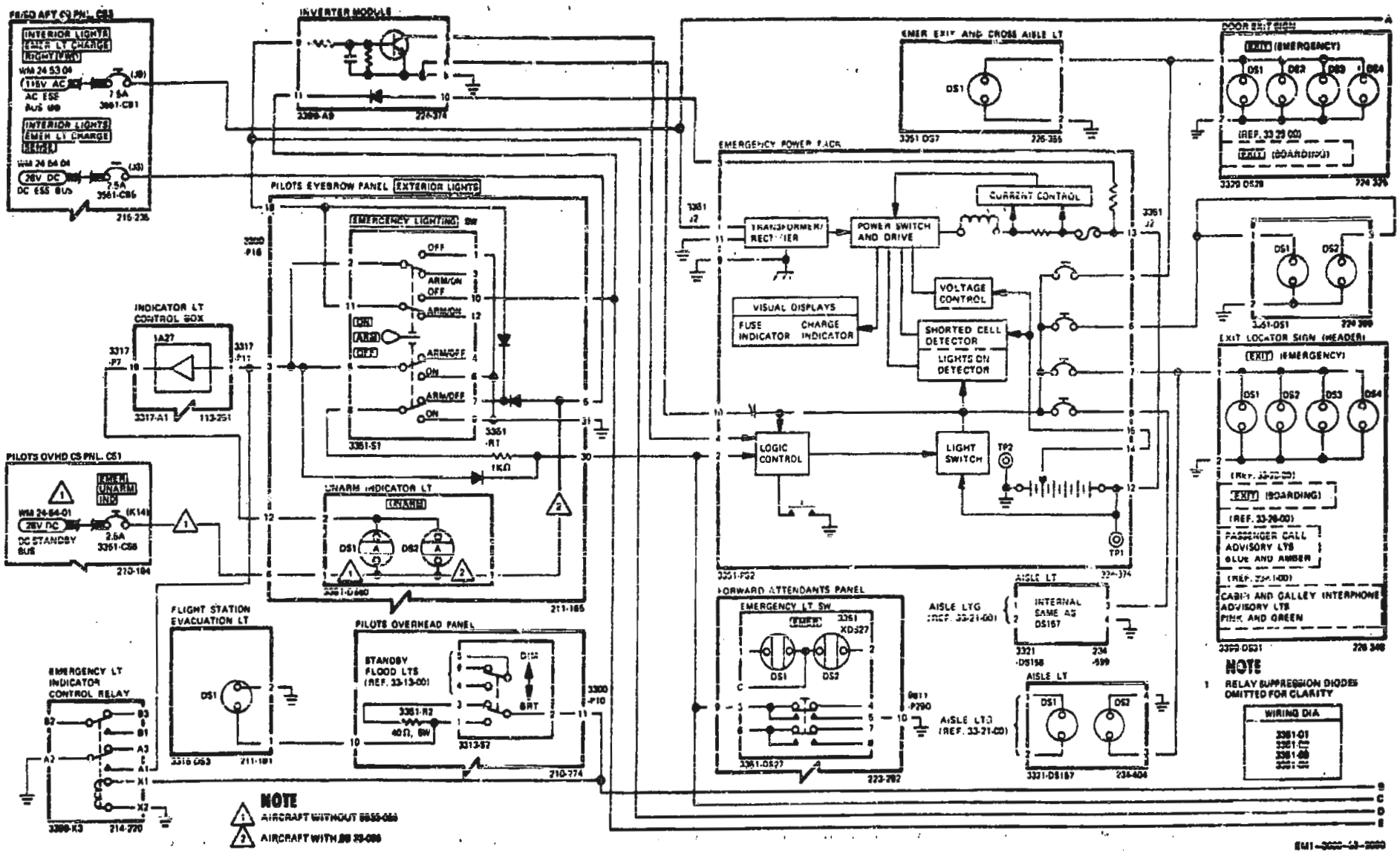
(1) ON AIRCRAFT 032-999

(2) ON AIRCRAFT 001-031

M1-0000-33-1883

Emergency Light and Power Pack Locations
Figure 104 (Sheet 2)

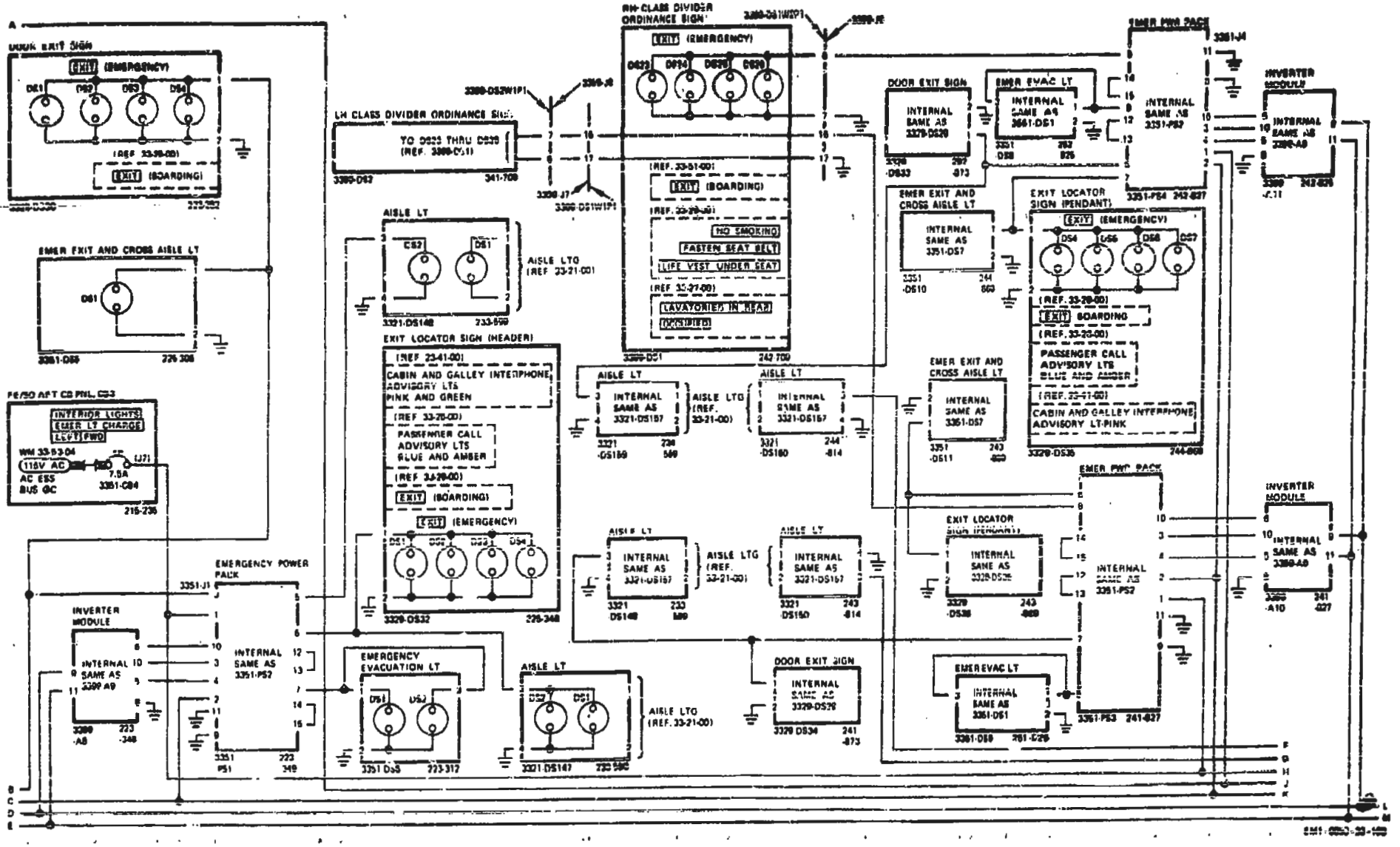
R EFFECTIVITY: ALL
R
0018



R Emergency Lighting Schematic
R SCHEM 1 (Sheet 1)

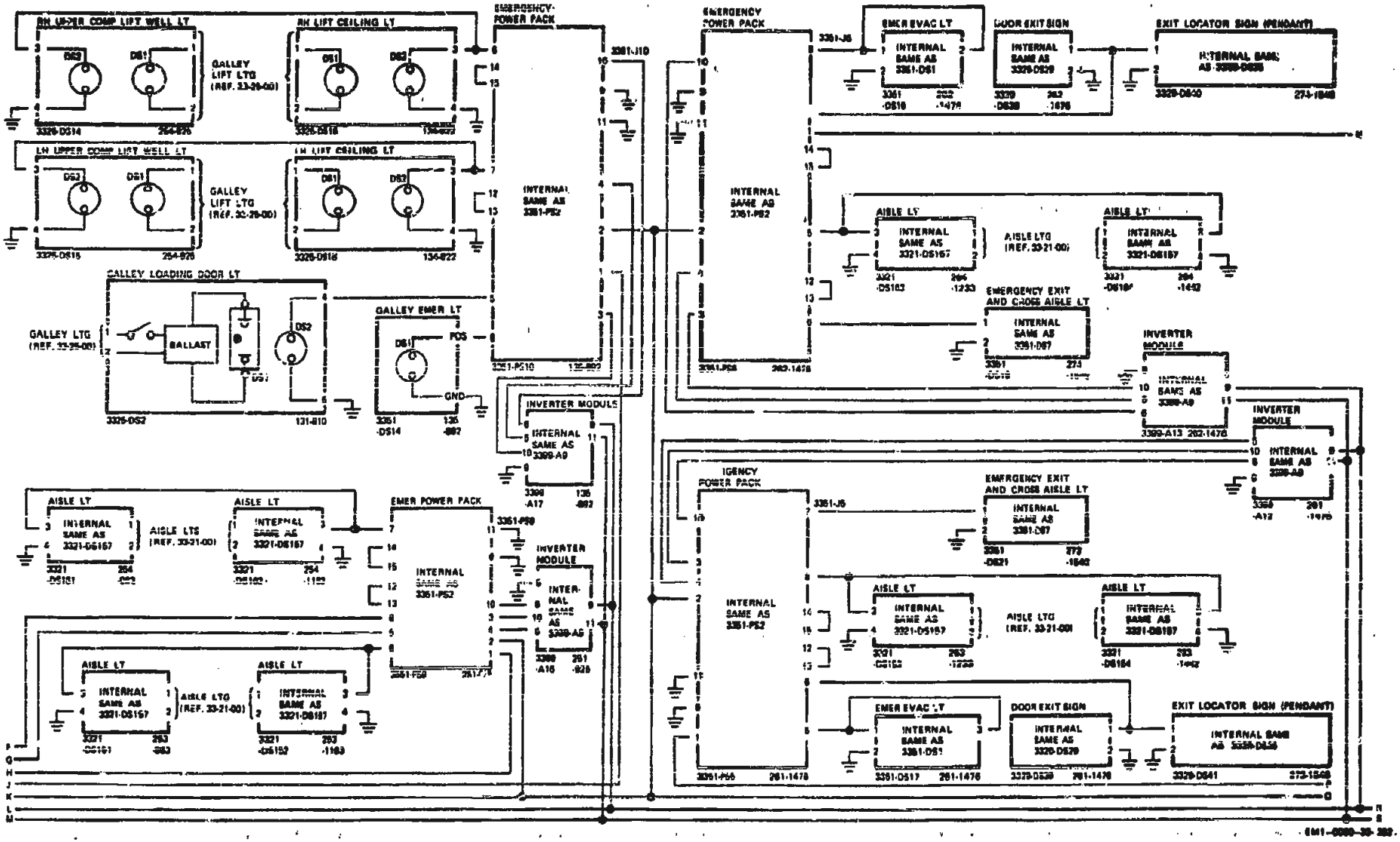
EFFECTIVITY: ALL

001B



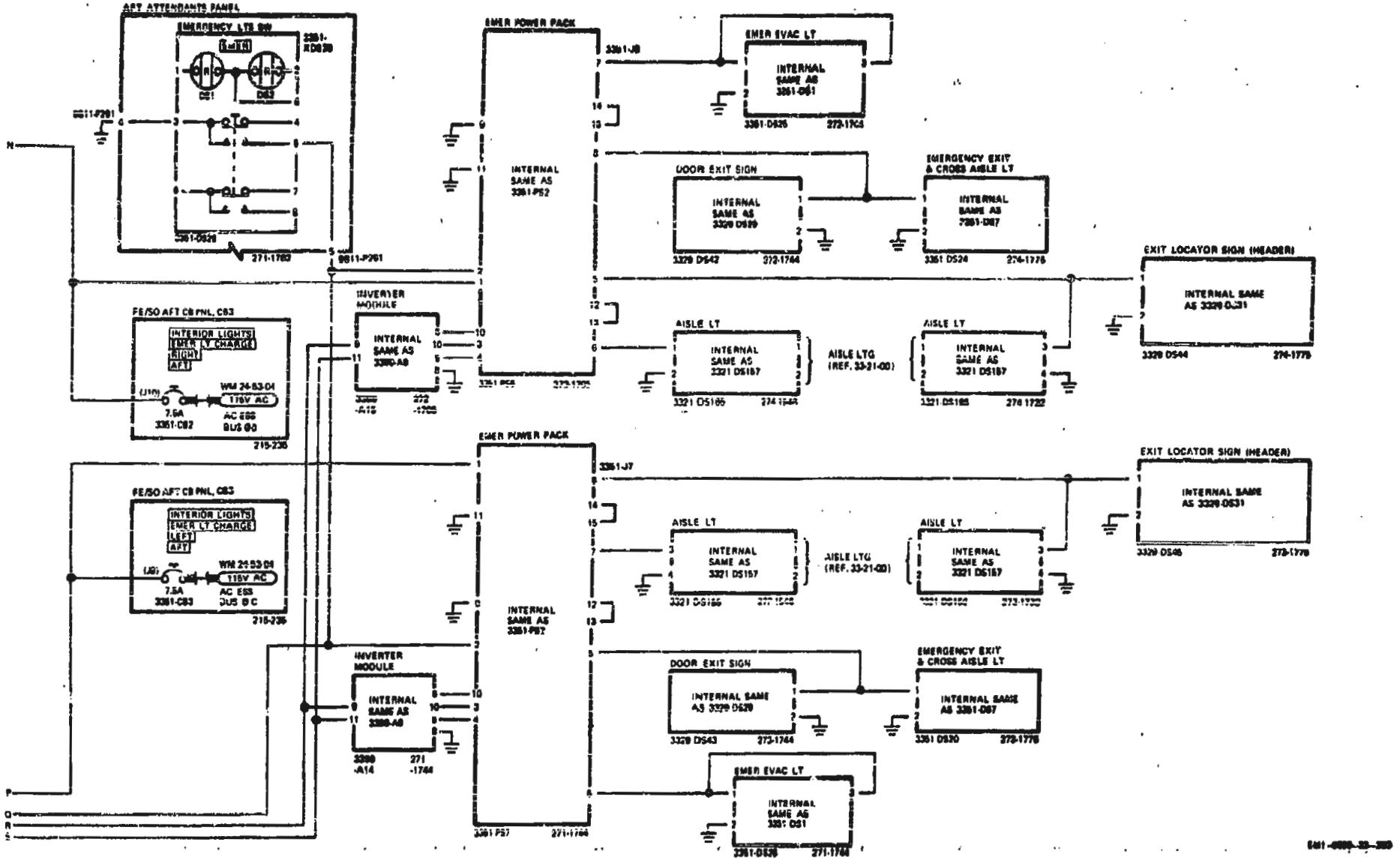
Emergency Lighting Schematic
SCHEM 1 (Sheet 2)

R EFFECTIVITY: ALL
R
001B



Emergency Schematic
SCHEM 1 (Sheet 3)

R EFFECTIVITY: ALL
R
0018



Emergency Lighting Schematic
SCHEM 1 (Sheet 4)

R
R
0018

EFFECTIVITY: ALL

EMERGENCY LIGHTING SYSTEM - ADJUSTMENT AND TEST

1. Referenced Procedure

24-00-00 Electrical Power - Maintenance Practices

2. Adjustment/Test

NOTE: During these tests do not electrically operate the passenger doors.

A. Operational Test

(1) Turn on electrical power (Ref. 24-00-00).

R (2) On aircraft 001-031 without SB33-086,
R on pilots overhead circuit breaker panel CB1, zone 210,
R verify that EMER UNARM IND (K14) circuit breaker is
R closed.

R (2) On aircraft 001-031 with SB33-086 and 032-999,
R on Flight Engineer/Second Officers (FE/SO) aft circuit
R breaker panel CB3, zone 215, verify that the following
R circuit breakers are closed;

R EMER LT CHARGE SENSE (J6)

R EMER LT CHARGE LEFT FWD (J7)

R EMER LT CHARGE LEFT AFT (J8)

R EMER LT CHARGE RIGHT FWD (J9)

R EMER LT CHARGE RIGHT AFT (J10)

R (3) Verify that all emergency power pack amber charging
R lights are off or cycling.

R NOTE: On aircraft with Gulton SB33-2,
R amber charging lights do not cycle.

R (4) On eyebrow panel, zone 210, verify that EMERGENCY
R LIGHTING switch is in OFF position; verify that UNARM
R annunciator light is on.

R (5) On eyebrow panel place EMERGENCY LIGHTING switch in ON
R position; verify that all emergency lights come on, and
R UNARM annunciator light remains on.

(6) Place EMERGENCY LIGHTING switch in OFF position; verify that all emergency lights go off, and UNARM annunciator light remains on.

(7) Place EMERGENCY LIGHTING switch in ARM position; verify that UNARM annunciator light goes off.

(8) Momentarily press forward cabin attendant EMER lights switch; verify that all emergency lights and UNARM annunciator light come on.

(9) Place EMERGENCY LIGHTING switch in OFF position; verify that all emergency lights go off, and UNARM annunciator light remains on.

(10) Momentarily press aft cabin attendant EMER lights switch; verify that all emergency lights come on, and UNARM annunciator light remains on.

(11) Place EMERGENCY LIGHTING switch in ARM position then in OFF position; verify that all emergency lights go off, and UNARM annunciator light remains on.

CR
CR NOTE: Lower Galley EMERG light switch may not be installed on some A/C.

(12) Momentarily press lower galley EMER lights switch; verify that all emergency lights come on, and UNARM annunciator light remains on.

(13) Place EMERGENCY LIGHTING switch in ARM position then in OFF position; verify that all emergency lights go off, and UNARM annunciator light remains on.

(14) Place EMERGENCY LIGHTING switch in ARM position; verify that UNARM annunciator light goes off.

(15) On FE/SO ELECTRICAL panel verify that BATTERY switch is in ON position.

(16) On FE/SO aft circuit breaker panel CB3, open DC TIE BUS - PWR (F3) and ESS T/R PWR (F17) circuit breakers; verify that all emergency lights come on.

C
C
C
C
C NOTE: All light assemblies may not come ON when the circuit breakers are pulled. If all light assemblies are not ON, reset the circuit breakers, and remove power from the aircraft. All emergency lights must now come ON.

(17) Close circuit breakers F3 and F17.

(18) Place EMERGENCY LIGHTING switch in OFF position; verify that all emergency lights go off, and UNARM annunciator light comes on.

(19) On aircraft with Gulton SB33-6, on FE/SO aft circuit breaker panel CB3, open EMER LT CHARGE SENSE (J6) circuit breaker.

(20) On aircraft with Gulton SB33-06, place EMERGENCY LIGHTING switch in ON position; verify that all emergency lights come on, and UNARM annunciator light remains on.

(21) On aircraft with Gulton SB33-6, on FE/SO aft circuit breaker panel CB3, close EMER LT CHARGE SENSE (J6) circuit breaker.

NOTE: Gulton SB33-6 modifies emergency lights power paks to allow the pak battery to provide an alternate power source for the 28V dc sense logic circuit. The alternate power source allows emergency lights to be manually turned on after they have been manually turned off and aircraft 28V dc essential bus sensing power is not available. The preceding 3 steps verify proper operation of this alternate sense power source function. This procedure can be accomplished on aircraft with at least one power pak incorporating Gulton SB33-6.

Incorporation of Gulton SB33-6 is indicated on the power pak by removal of number 7 from the change status decal. All EMBS 141 emergency power paks are covered by Gulton SB33-6. Incorporation may be determined by local airline inspection.

(22) Place EMERGENCY LIGHTING switch in OFF position; verify that all emergency lights go off.

(23) Place EMERGENCY LIGHTING switch in ARM position and allow emergency lighting power packs to recharge until all amber charging lights go off.

(24) Place EMERGENCY LIGHTING and BATTERY switches to OFF position.

(25) Turn off electrical power (Ref. 24-00-00).

EMERGENCY EVACUATION LIGHT - REMOVAL AND INSTALLATION

1. Removal/Installation

A. Removal

(1) Loosen screws securing lens to evacuation light housing. Allow lens to hand by lanyard (Ref. Fig. 401).

(2) Remove screws securing lampholder assembly to evacuation light housing. Pull lampholder assembly from housing.

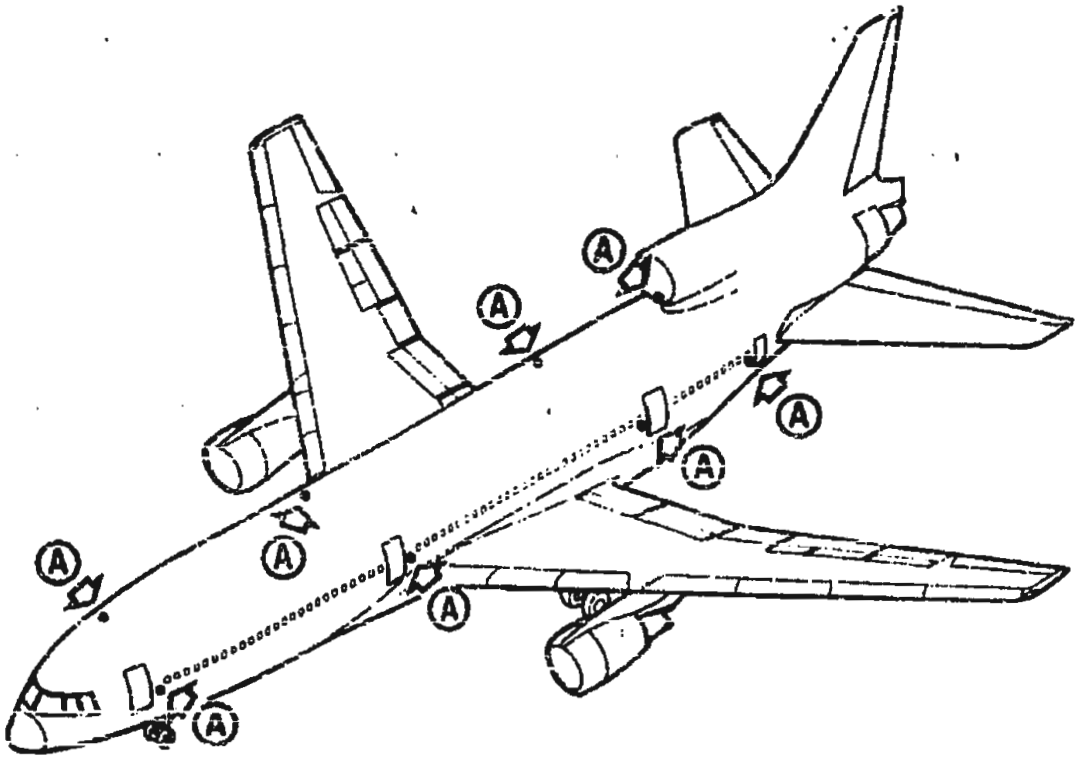
(3) Remove and tag wires connected to terminals of lampholder assembly.

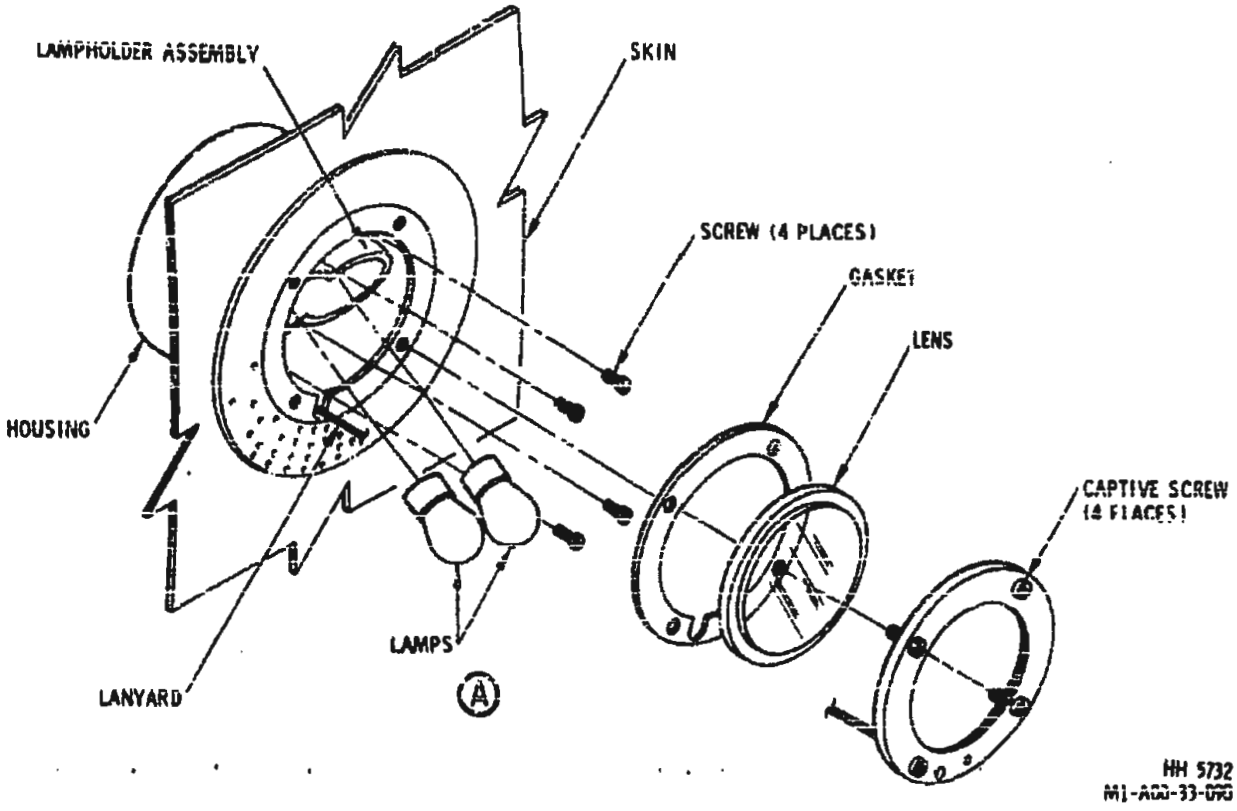
B. Installation

(1) Attach wires to terminals of lampholder assembly (Ref. Fig. 401).

(2) Position lampholder assembly in housing and secure with screws.

(3) Position lens on housing and secure with screws.





Emergency Evacuation Light
Figure 401

EMERGENCY POWER PACK - REMOVAL AND INSTALLATION

1. Referenced Procedure

24-41-00	External Power/Ground Service System - Maintenance Practices
33-51-00	Emergency Lighting System - Adjustment and Test

2. Removal/Installation

A. Removal

CAUTION: VERIFY THAT EMERGENCY LIGHTING SWITCH ON EYEBROW PANEL IS IN OFF POSITION.

NOTE: When emergency power packs are being removed only for storage, (not due to failure) discharge the packs to 24 volts (1 volt per cell) prior to removal. This can be accomplished by placing the EMERGENCY LIGHTING switch on the eyebrow panel to ON, verifying that the emergency lights come on and placing the EMERGENCY LIGHTING switch to OFF after the lights go out.

(1) Open and tag applicable EMER LT CHARGE circuit breaker LEFT FWD or AFT, or RIGHT FWD or AFT on Flight Engineer/Second Officers vertical circuit breaker panel CB3, zone 215.

R (2) Gain access to emergency power pack (Ref. Fig. 401). (Power packs are located in end overhead cabinets adjacent to each of eight passenger doors, in mid-cabin service center RH cabinet, and in galley ceiling.)

(3) Rotate two knurled fasteners counterclockwise, one at each upper corner of front panel.

(4) Pull top end of front panel down. Emergency power pack will swing down to horizontal position.

(5) Grasp trigger in handle and squeeze releasing handle.

(6) Push handle out and down releasing cam from keeper. Pull emergency power pack out.

B. Installation

CAUTION: THE EMERGENCY POWER PACK MUST RECEIVE A CELL-BALANCING 18-HOUR INITIAL CHARGE BEFORE INSTALLATION. OTHERWISE, AN IMPROPER CHARGE FROM AIRCRAFT POWER MAY RESULT.

(1) Verify that circuit breaker listed in Step 1A(1) is open.

(2) Position emergency power pack on tray (rear side of front panel). Slide emergency power pack into tray, and mate electrical plug on power pack with receptacle on tray.

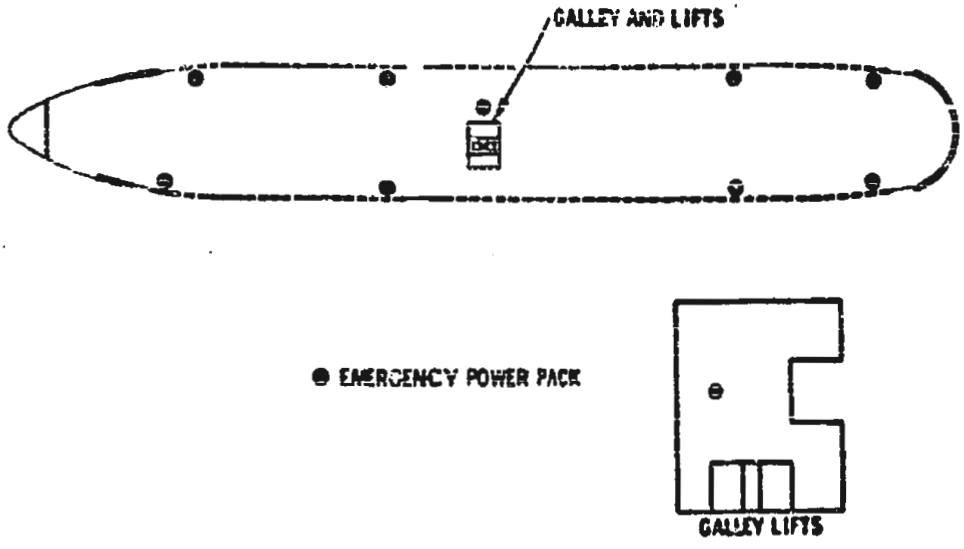
(3) Push camlock handle up and in, and engage cam with keeper.

NOTE: Camlock handle will recess into carrying handle.

(4) Swing emergency power pack and tray assembly upwards. Insert knurled fasteners into holes and rotate fasteners clockwise to lock assembly in place.

(5) Remove tag and close circuit breaker opened in Step 2A(1).

(6) Turn on electrical power (Ref. 24-41-00).

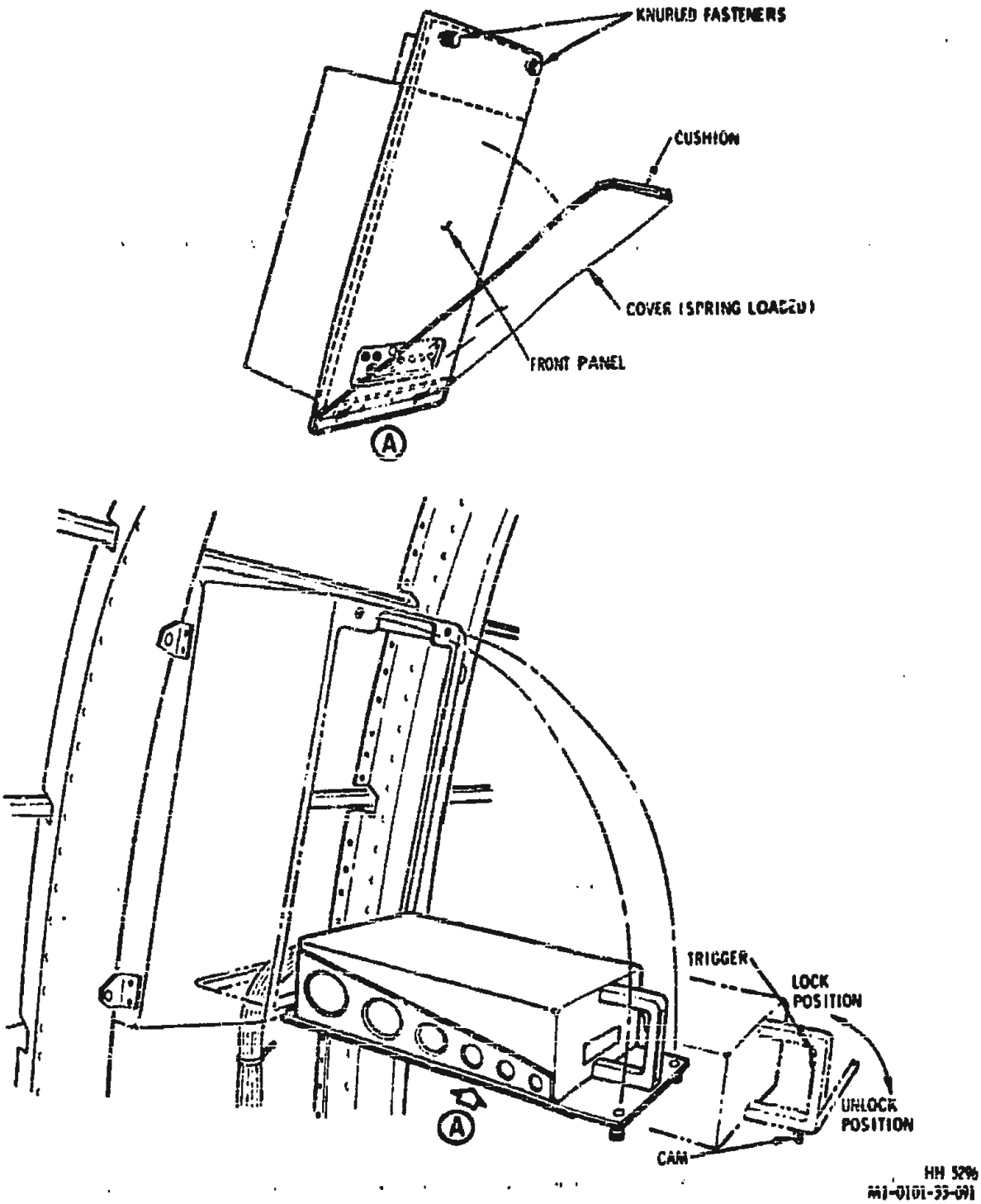


R
R

Emergency Power Pack
Figure 401 (Sheet 1)

EFFECTIVITY: ALL

C01B



Emergency Power Pack
Figure 401 (Sheet 2)

(7). Perform Emergency Power Pack BITE check on units replaced as follows: Push TEST button and verify that lights go on. Release TEST button and verify that lights go off. If lights were on for one minute or longer, verify that amber charge light on power pack comes on.

(8) Turn off electrical power (Ref. 24-41-00).

EMERGENCY POWER PACK - ADJUSTMENT AND TEST

1. Referenced Procedure

24-00-00 Electrical Power - Maintenance Practices

2. Adjustment/Test

NOTE: During these tests do not electrically operate the passenger doors.

A. Functional Test

(1) Turn on electrical power (Ref. 24-00-00).

R (2) On aircraft 001-031 without SB33-086,
R on pilots overhead circuit breaker panel CB1, zone 210, verify that EMER UNARM IND (K14) circuit breaker is closed.

(3) On Flight Engineer/Second Officers (FE/SO) aft circuit breaker panel CB3, zone 215, verify that EMER LT CHARGE SENSE (J6) circuit breaker is closed.

(4) On FE/SO aft circuit breaker panel CB3, zone 215, open and tag the following circuit breakers;

EMER LT CHARGE LEFT FWD (J7)

EMER LT CHARGE LEFT AFT (J8)

EMER LT CHARGE RIGHT FWD (J9)

EMER LT CHARGE RIGHT AFT (J10)

(5) Verify that all emergency power pack amber charging lights are off.

(6) On eyebrow panel, zone 210, place EMERGENCY LIGHTING switch in OFF position; verify that UNARM annunciator light comes on.

(7) Place EMERGENCY LIGHTING switch in ARM position; verify that UNARM annunciator light goes off.

(8) Press TEST button on emergency power pack for each group of lights (Ref. Fig. 501); verify that all emergency lights in each group come on.

(9) Release TEST button; verify that all emergency lights go off.

(10) Place EMERGENCY LIGHTING switch in ON position; verify that all emergency lights come on. Leave switch on for 10 (+1, -0) minutes.

(11) Place EMERGENCY LIGHTING switch in OFF position; verify that all emergency lights go off.

(12) Allow emergency power packs to cool for 2 hours prior to carrying out steps 13 through 15.

R

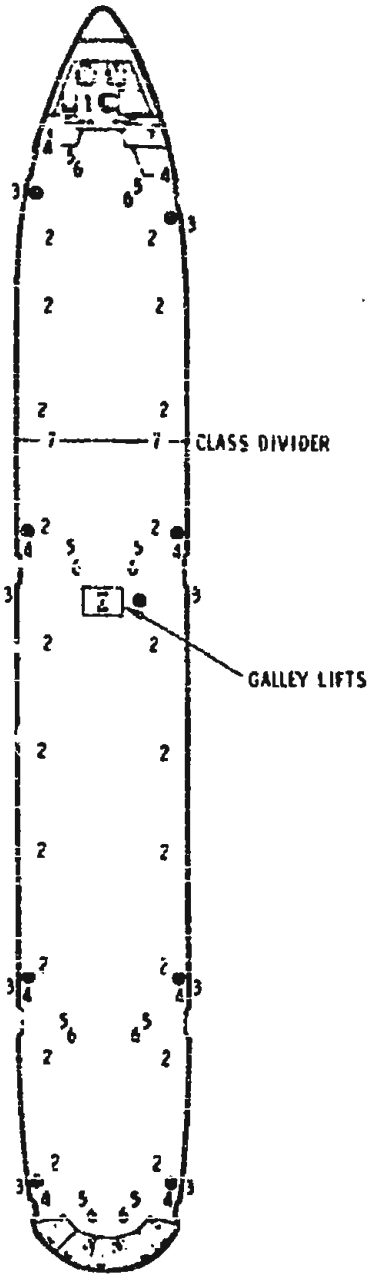
NOTE: On aircraft with Gulton SB33-3 the emergency power packs contain a thermostat which will prevent battery fast charging when the ambient temperature reaches 65°±5°C (149°±9°F).

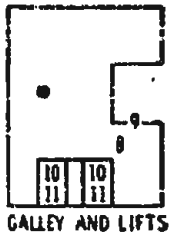
(13) Remove tags and close circuit breakers opened in Step 2A(4).

(14) Place EMERGENCY LIGHTING switch in OFF position; verify that amber charging light on each emergency power pack is on (10 places).

(15) Allow emergency power packs to charge until amber charging lights go off (approximately one hour).

(16) Turn off electrical power (Ref. 24-00-00).





- ● EMERGENCY POWER PACK
- 1 FLIGHT STATION EMERGENCY LIGHT
- 2 EMERGENCY AISLE LIGHT
- 3 EMERGENCY EVACUATION LIGHT
- 4 EXIT SIGN
- 5 EXIT LOCATOR SIGN
- 6 EMERGENCY EXIT AND CROSS AISLE LIGHT
- 7 CLASS DIVIDER EXIT SIGN
- 8 GALLEY EMERGENCY LIGHT
- 9 GALLEY DOOR LIGHT
- 10 LIFT CAGE LIGHT
- 11 LIFT SHAFT LIGHT

HH 7705
M1-0100-33-202

Emergency Light and Power Pack Locations
Figure 501 (Sheet 1)

POWER PACK NO.	POWER PACK LOCATION	EMERGENCY LIGHTS											
		FLIGHT STATION EMERGENCY LIGHT	EXIT LOCATOR SIGN	EXIT SIGN (WALL)	EMERGENCY EXIT & CROSS AISLE LIGHT	EMERGENCY EVACUATION LIGHT	EMERGENCY AISLE LIGHT	CLASS DIVIDER EXIT SIGN	LIFT CAGE LIGHT	LIFT SHAFT LIGHT	GALLEY LOADING DOOR LIGHT	GALLEY EMERGENCY LIGHT	
1	FORWARD LH PASSENGER DOOR (L-1)	1	1	1	1	1	2						
2	FORWARD RH PASSENGER DOOR (R-1)		1	1	1	1	2						
3	CENTER LH PASSENGER DOOR (L-2)		1	1	1	1	1	1					
4	CENTER RH PASSENGER DOOR (R-2)		1	1	1	1	1	1					
5	AFT LH PASSENGER DOOR (L-3)		1	1	1	1	2						
6	AFT RH PASSENGER DOOR (R-3)		1	1	1	1	2						
7	AFT LH EMERGENCY DOOR (L-4)		1	1	1	1	2						
8	AFT RH EMERGENCY DOOR (R-4)		1	1	1	1	2						
9 (1)	CENTER CABIN						4		1	1			
9 (2)	CENTER CABIN						6						
10 (1)	GALLEY						2		1	1	1	1	
10 (2)	GALLEY								2	2	1	1	

1 ON AIRCRAFT 032-999

2 ON AIRCRAFT 001-031

M1-0000-33-1663

R Emergency Light and Power Pack Locations
R Figure 501 (Sheet 2)

EFFECTIVITY: ALL

001B

EMERGENCY EXIT AND CROSS AISLE LIGHT - REMOVAL AND INSTALLATION

1. Removal/Installation

A. Removal

(1) Grasp opposing edges of lens bezel on exit locater light and pull down (Ref. Fig. 401). Allow lens to hang by lanyard.

(2) Unfasten and lower ceiling panel containing exit locater light to be removed to gain access to rear of panel.

(3) Remove and tag wires connected to exit locater light terminals.

(4) Remove screws securing exit locater light assembly to ceiling panel.

(5) Pull lens through hole in ceiling panel and remove exit locater light assembly from rear of ceiling panel.

B. Installation

(1) Unfasten and lower ceiling panel to gain access to rear of panel.

(2) Pass lens of exit locater light assembly through mounting hole in ceiling panel. Allow lens to hang by lanyard.

(3) Position exit locater light assembly in place on rear of ceiling panel.

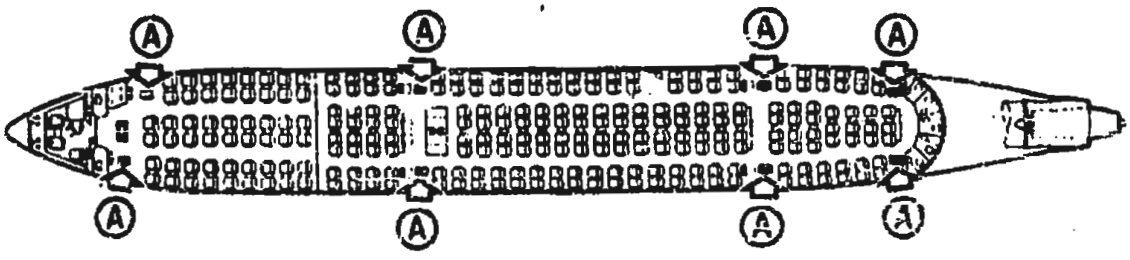
NOTE: Three mounting holes of assembly must be aligned with three threaded inserts in ceiling panel.

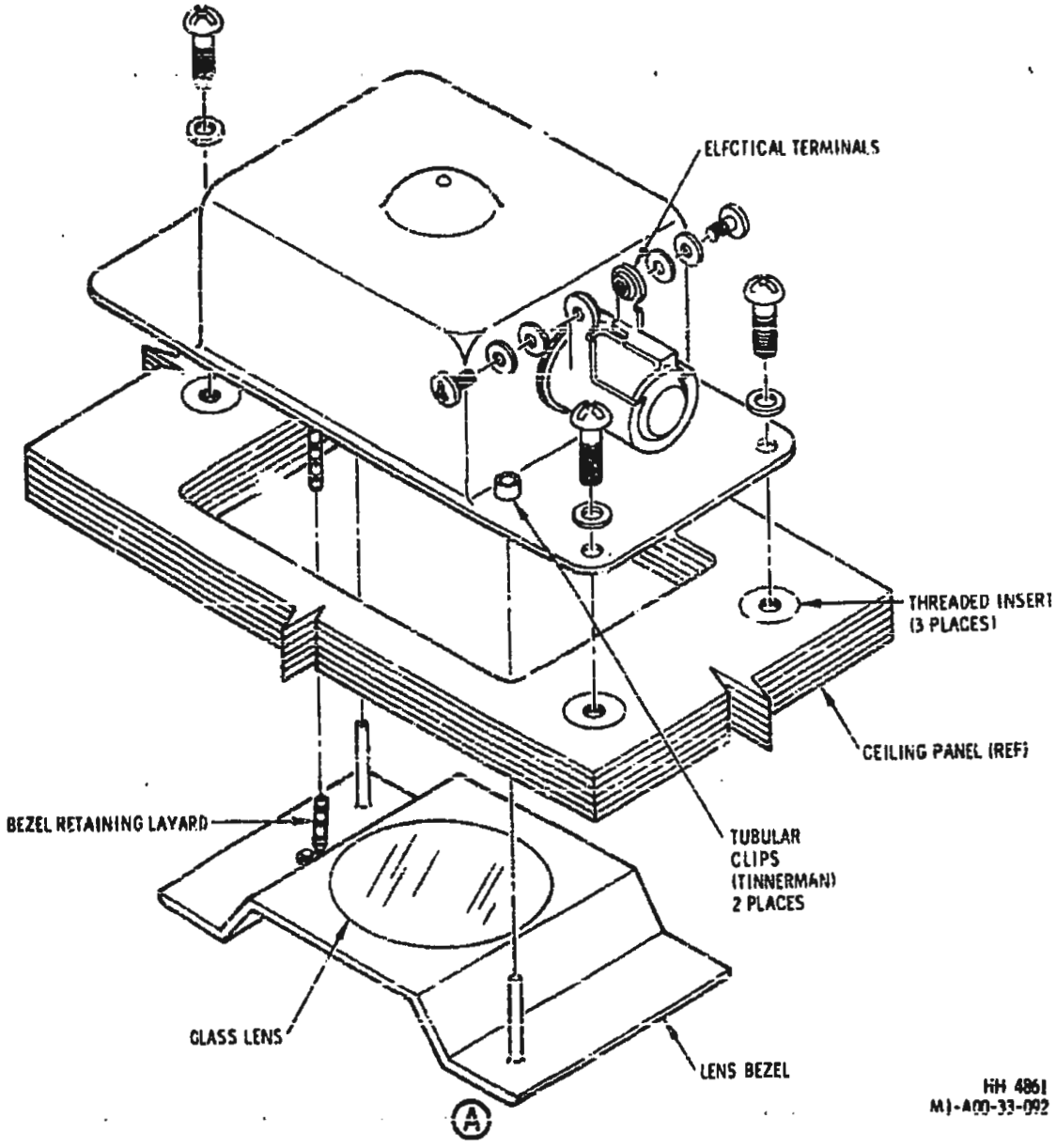
(4) Secure assembly with screws.

(5) Attach wires to terminals on exit locater light assembly.

(6) Replace ceiling panel.

(7) Align lens with exit locater light assembly and push lens upwards into place.





Emergency Exit and Cross Aisle Light
Figure 401

INVERTER MODULE - REMOVAL AND INSTALLATION

1. Referenced Procedures

20-03-03	Standard Practices - Insertion/Removal Tools - Maintenance Practices
24-00-00	Electrical Power - Maintenance Practices
33-51-00	Emergency Lighting System - Adjustment and Test
33-51-03	Emergency Power Pack - Removal/Installation

2. Removal/Installation

A. Removal

WARNING: VERIFY THAT EMERGENCY LIGHTING SWITCH ON EYEBROW PANEL IS IN OFF POSITION.

(1) Open and tag applicable EMER LT CHARGE circuit breaker LEFT FWD or AFT, or RIGHT FWD or AFT on Flight Engineer/Second Officers vertical circuit breaker panel CB3, zone 215.

(2) Remove Emergency Power Pack (Ref. 33-51-03,401).

(3) Gain access to Inverter Module at rear of Emergency Power Pack tray (Ref. Fig. 401).

(4) Tag wire locations on Inverter Module connector and remove wires with NAS 1664-20 Insertion/Removal Tool (Ref. WDM 20-03-03).

R (5) Remove Inverter Module by removing mounting screws
R (Ref. Fig. 401).

R NOTE: Retain screws and washers for reinstallation.

B. Installation.

(1) Verify that circuit breaker(s) listed in Step 2A(1) is open.

R (2) Install Inverter Module on rear of Emergency Power Pack tray, using retained screws and washers (Ref. Fig. 401).

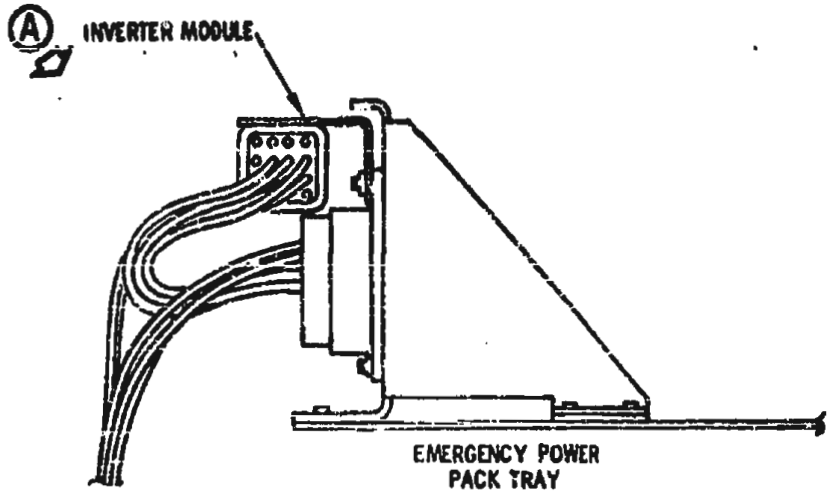
(3) Insert wires in Inverter Module connector with NAS 1664-20 Insertion/Removal Tool (Ref. WDM 20-03-03) and remove tags.

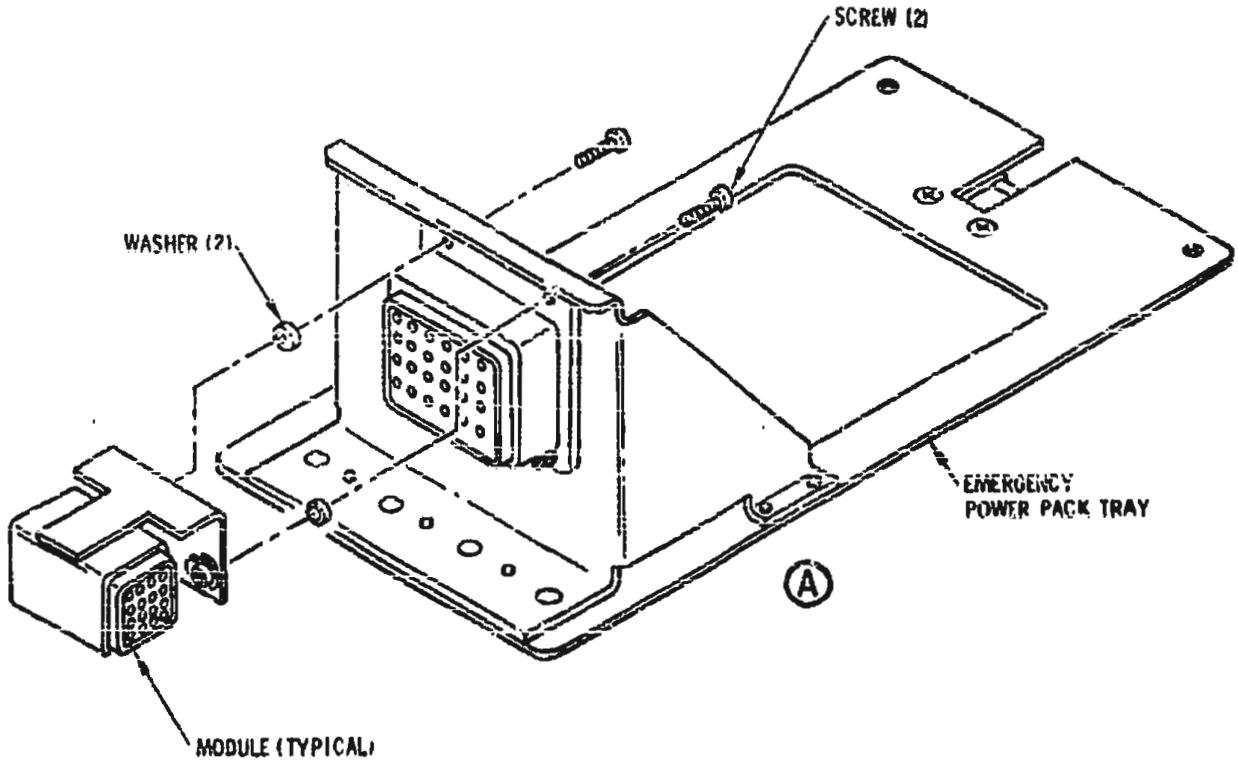
(4) Install Emergency Power Pack (Ref. 33-51-03,401).

(5) Close circuit breaker(s) opened in Step 2A(1).

(6) Perform Adjustment and Test procedure (Ref. 33-51-03,501).

(7) Swing Emergency Power Pack and tray assembly upwards and secure.





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R
R

Inverter Module
Figure 401

EFFECTIVITY: ALL

0016

FLIGHT STATION EMERGENCY EVACUATION LIGHT - REMOVAL AND INSTALLATION

1. Removal/Installation

A. Removal

(1) Verify that EMERGENCY LIGHTING switch on eyebrow panel, zone 210, is in OFF position and tag.

(2) Remove screws securing lens retainer to light assembly. Remove lens retainer and lens (Ref. Fig. 401).

(3) Remove screws securing light assembly to ceiling panel. Pull light assembly away from ceiling to gain access to wire terminals.

(4) Slide boot off wire terminals; tag and remove wires from light fixture.

B. Installation

(1) Verify that EMERGENCY LIGHTING switch on eyebrow panel, zone 210, is in OFF position and tag.

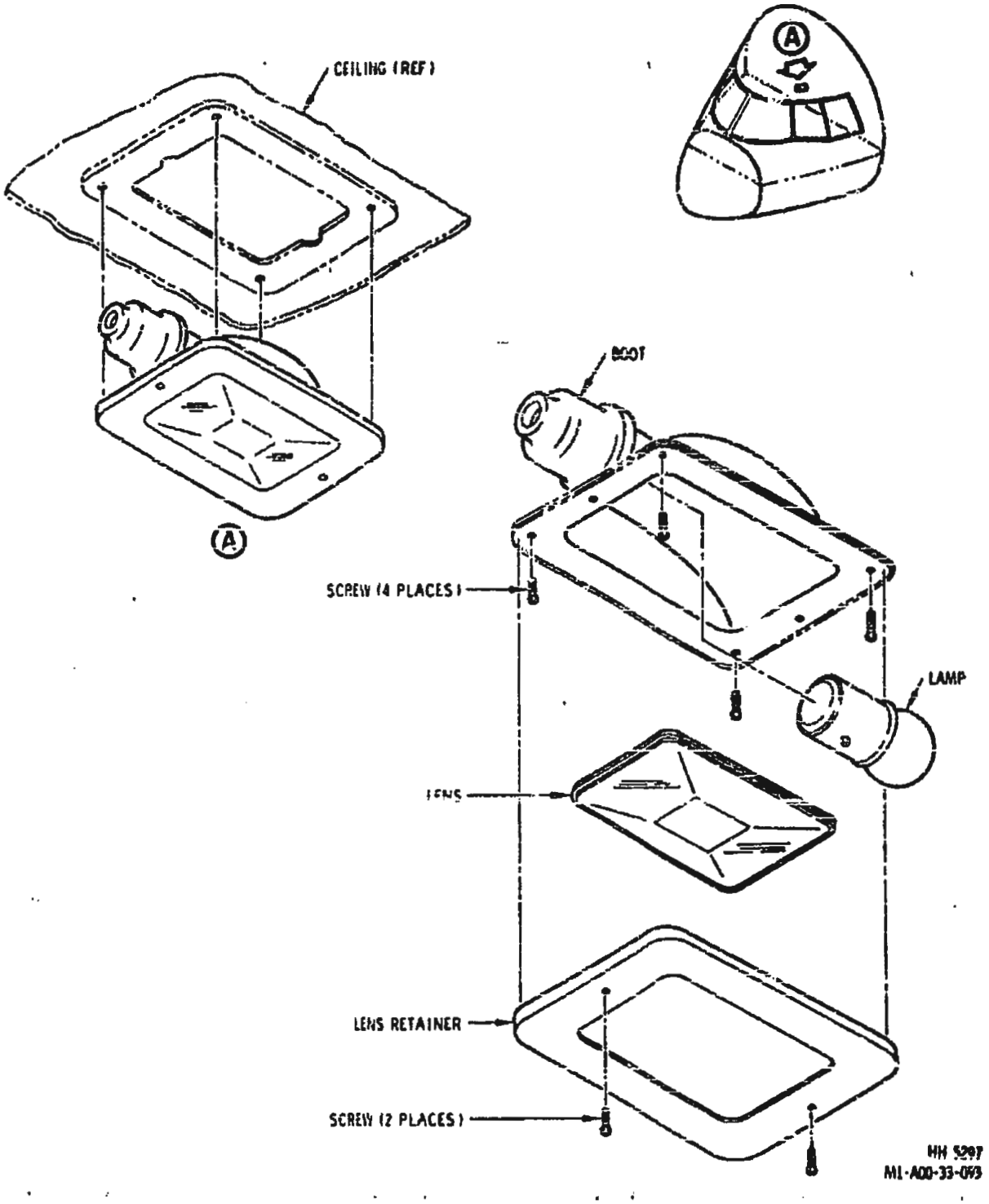
(2) Position boot around wires. Attach wires to light fixture terminal. Slide boot into position covering terminals (Ref. Fig. 401).

(3) Position light assembly in ceiling panel and secure with screws.

R (4) Position lens and lens retainer on light fixture and secure with screws.

R (5) Remove tag and turn EMERGENCY LIGHTING switch to ON to test lamp.

(6) Return EMERGENCY LIGHTING switch to OFF.



Flight Station Emergency Evacuation Light
Figure 401

GALLEY EMERGENCY LIGHT - REMOVAL AND INSTALLATION

1. Removal/Installation

A. Removal

(1) On eyebrow panel, zone 210, verify that EMERGENCY LIGHTING toggle switch is in OFF position.

R R (2) Remove light bezel by releasing camloc fasteners (Ref. Fig. 401).

(3) Remove light mounting screws.

(4) Pull light from ceiling panel to expose electrical terminals; disconnect and tag wires.

B. Installation

(1) On eyebrow panel, verify that EMERGENCY LIGHTING toggle switch is in OFF position.

(2) Remove tags and connect wires to light terminals.

(3) Set light into position and install mounting screws.

(4) Install bezel.

2. Relamping

A. Galley Emergency Light

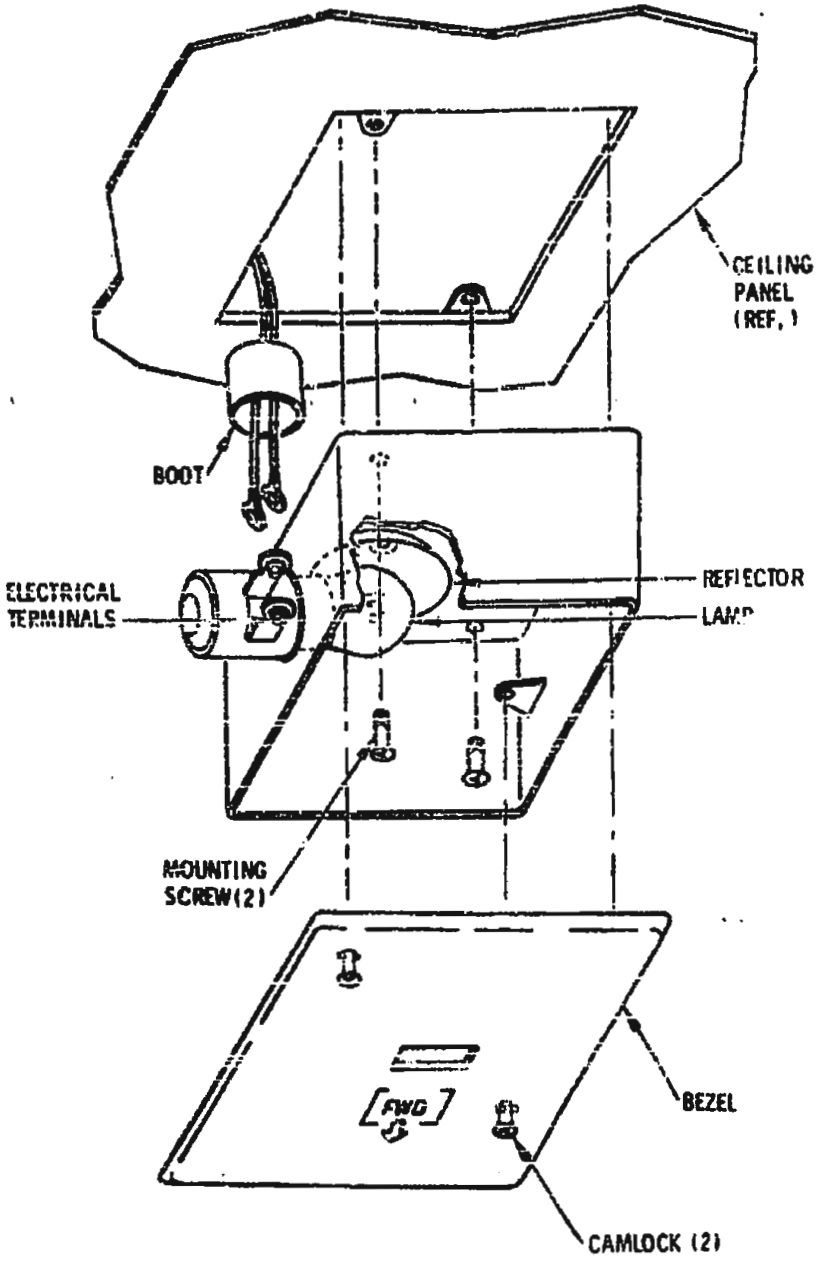
(1) Remove bezel by releasing camloc fasteners.

(2) Remove faulty lamp.

(3) Install replacement lamp.

(4) Turn on light at power pack to test lamp.

(5) Install bezel.



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Galley Emergency Light - Removal and Installation
Figure 401

CR # EMERGENCY EGRESS LIGHTING SYSTEM - DESCRIPTION AND OPERATION

CR 1. General

CR A. The emergency egress lighting system uses ten egress power supplies to provide power for the egress exit markers (Ref. Figure 1) and egress aisle lighting (Ref. Figure 6) in the passenger compartment.

CR B. The system is controlled and monitored by a guarded EMERGENCY LIGHTING switch and an UNARM light on the pilots eyebrow panel in the flight station. In addition, a guarded EMER switchlight is installed on the forward and aft cabin attendants panels.

CR C. On aircraft 032-036, there is also a guarded EMER switchlight installed on the intercom panel in the lower galley.

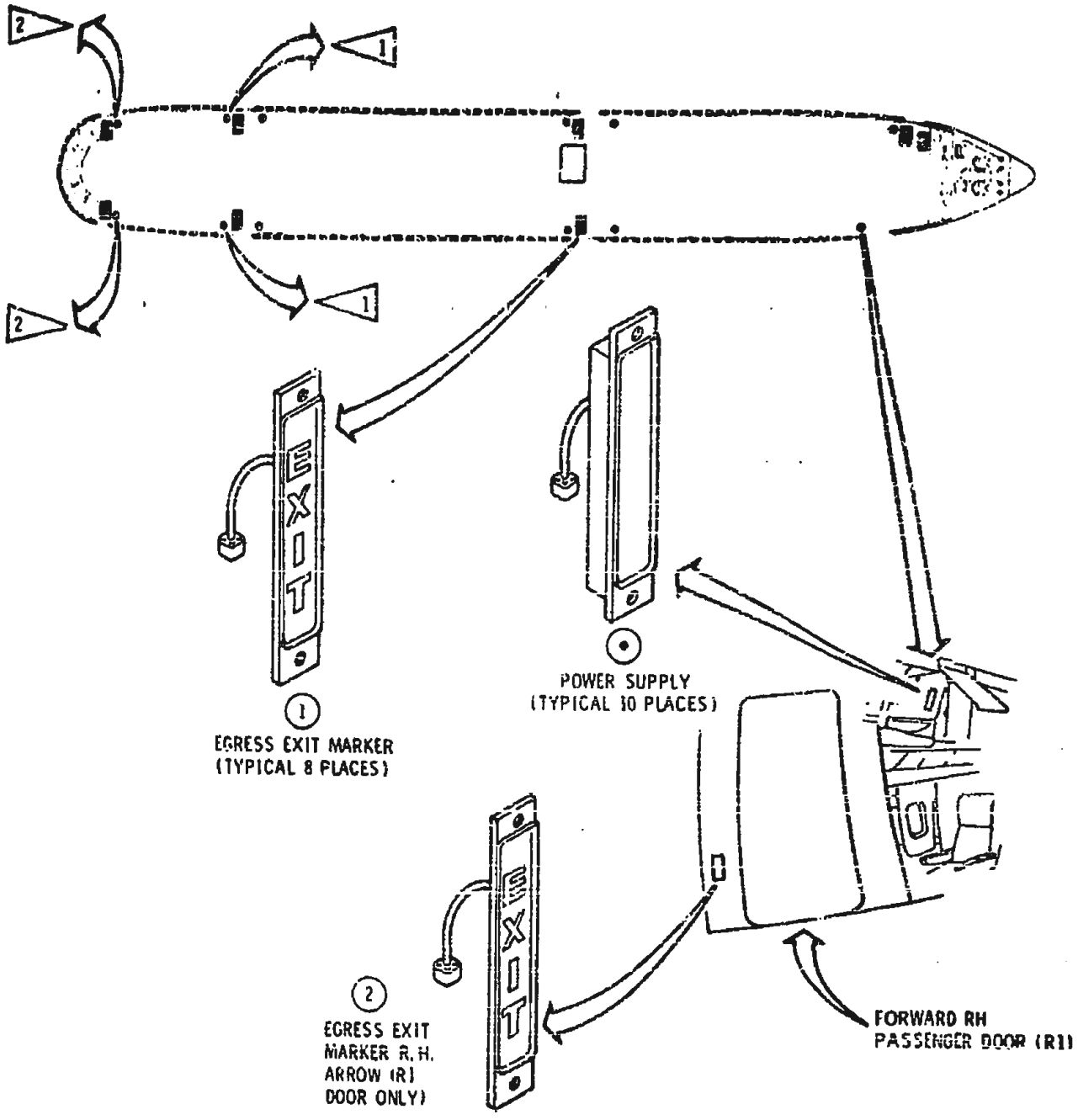
CR 2. Operation

CR A. In normal operation with the EMER LT CHARGE SENSE circuit breaker (CB3, J6) closed and the EMERGENCY LIGHTING switch in the ARM position (Ref. Figure 2), the dc essential bus is monitored by each of the egress power supplies. Loss of bus power will be sensed by the power supply and battery power will be provided to the egress exit markers and egress aisle lighting.

CR B. The emergency lights can be manually turned on by setting the EMERGENCY LIGHTING switch to ON, or by actuating one of the EMER switchlights.

CR C. The UNARM light on the eyebrow panel is powered by the dc essential bus. When the EMERGENCY LIGHTING switch is in the ON or OFF position the light circuit is completed to ground.

CR D. The power supply charging circuits are powered by the dc essential bus.



NOTE

1 ON AIRCRAFT 31032 THRU 31036 ONLY.

2 ON AIRCRAFT 11001 THRU 31031

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CR Egress Exit Marker, Egress Aisle Lighting and Power
CR Supply Locations
CR Figure 1 (Sheet 1 of 3)

R EFFECTIVITY: ALL
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POWER SUPPLY NO. 3351-( )	POWER SUPPLY LOCATION	EGRESS EXIT MARKER NO. 3351-( )	EGRESS EXIT MARKER LOCATION	EGRESS AISLE LIGHTING LOCATION	EGRESS AISLE (CROSS-AISLE) LIGHTING LOCATION
PS9001	FORWARD LH PASSENGER DOOR (L1)	DS9001 AND DS9008	FORWARD LH PASSENGER DOOR (L1)	ZONE "A" LH AISLE	
PS9002	FORWARD RH PASSENGER DOOR (R1)	DS9009	FORWARD RH PASSENGER DOOR (R1)	ZONE "A" RH AISLE	AISLE BETWEEN PASSENGER DOORS (L1-R1)
PS9003	CENTER LH PASSENGER DOOR (L2) FORWARD			ZONE "C" LH AISLE	AISLE (LH) BETWEEN PASSENGER DOORS (L2-R2)
PS9004	CENTER RH PASSENGER DOOR (R2) FORWARD			ZONE "C" RH AISLE	AISLE (RH) BETWEEN PASSENGER DOORS (L2-R2)
PS9005	CENTER LH PASSENGER DOOR (L2) AFT	DS9010	CENTER LH PASSENGER DOOR (L2)	ZONE "D" LH AISLE-FORWARD	
PS9006	CENTER RH PASSENGER DOOR (R2) AFT	DS9011	CENTER RH PASSENGER DOOR (R2)	ZONE "D" RH AISLE-FORWARD	
PS9007	AFT LH PASSENGER DOOR (L3) FORWARD			ZONE "D" LH AISLE-AFT	AISLE (LH) BETWEEN PASSENGER DOORS (L3-R3)

1 ON AIRCRAFT 31032 THRU 31036 ONLY.

2 ON AIRCRAFT 11001 THRU 31031 ONLY.

CR Egress Exit Marker, Egress Aisle Lighting and Power
CR Supply Locations
CR Figure 1 (Sheet 2 of 3)

R EFFECTIVITY: ALL
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POWER SUPPLY NO. 3351-( )	POWER SUPPLY LOCATION	EGRESS EXIT NO. 3351-( )	EGRESS EXIT MARKER LOCATION	EGRESS AISLE LIGHTING LOCATION	EGRESS AISLE (CROSS-AISLE) LIGHTING LOCATION
PS9008	AFT RH PASSENGER DOOR (R3) FORWARD			ZONE "D" RH AISLE-AFT	AISLE (RH) BETWEEN PASSENGER DOORS (L3-R3)
PS9009 [1]	AFT LH PASSENGER DOOR (L3) AFT	DS9012 AND DS9014	AFT LH PASSENGER DOOR (L3) & AFT LH EMERGENCY DOOR (L4)	ZONE "E" LH AISLE	AISLE (LH) BETWEEN EMERGENCY DOORS (L4-R4)
PS9009 [2]	AFT LH PASSENGER DOOR (L4) FORWARD	DS9012 AND DS9014	AFT LH PASSENGER DOOR (L3) & AFT LH EMERGENCY DOOR (L4)	ZONE "E" LH AISLE	AISLE (LH) BETWEEN EMERGENCY DOORS (L4-R4)
PS9010 [1]	AFT RH PASSENGER DOOR (R3) AFT	DS9013 AND DS9015	AFT RH PASSENGER DOOR (R3) & AFT RH EMERGENCY DOOR (R4)	ZONE "E" RH AISLE	AISLE (RH) BETWEEN EMERGENCY DOORS (L4-R4)
PS9010 [2]	AFT RH PASSENGER DOOR (R4) FORWARD	DS9013 AND DS9015	AFT RH PASSENGER DOOR (R3) & AFT RH EMERGENCY DOOR (R4)	ZONE "E" RH AISLE	AISLE (RH) BETWEEN EMERGENCY DOORS (L4-R4)

[1] ON AIRCRAFT 31032 THRU 31036 ONLY.

[2] ON AIRCRAFT 11001 THRU 31031 ONLY.

CR Egress Exit Marker, Egress Aisle Lighting and Power
CR Supply Locations
CR Figure 1 (Sheet 3 of 3)

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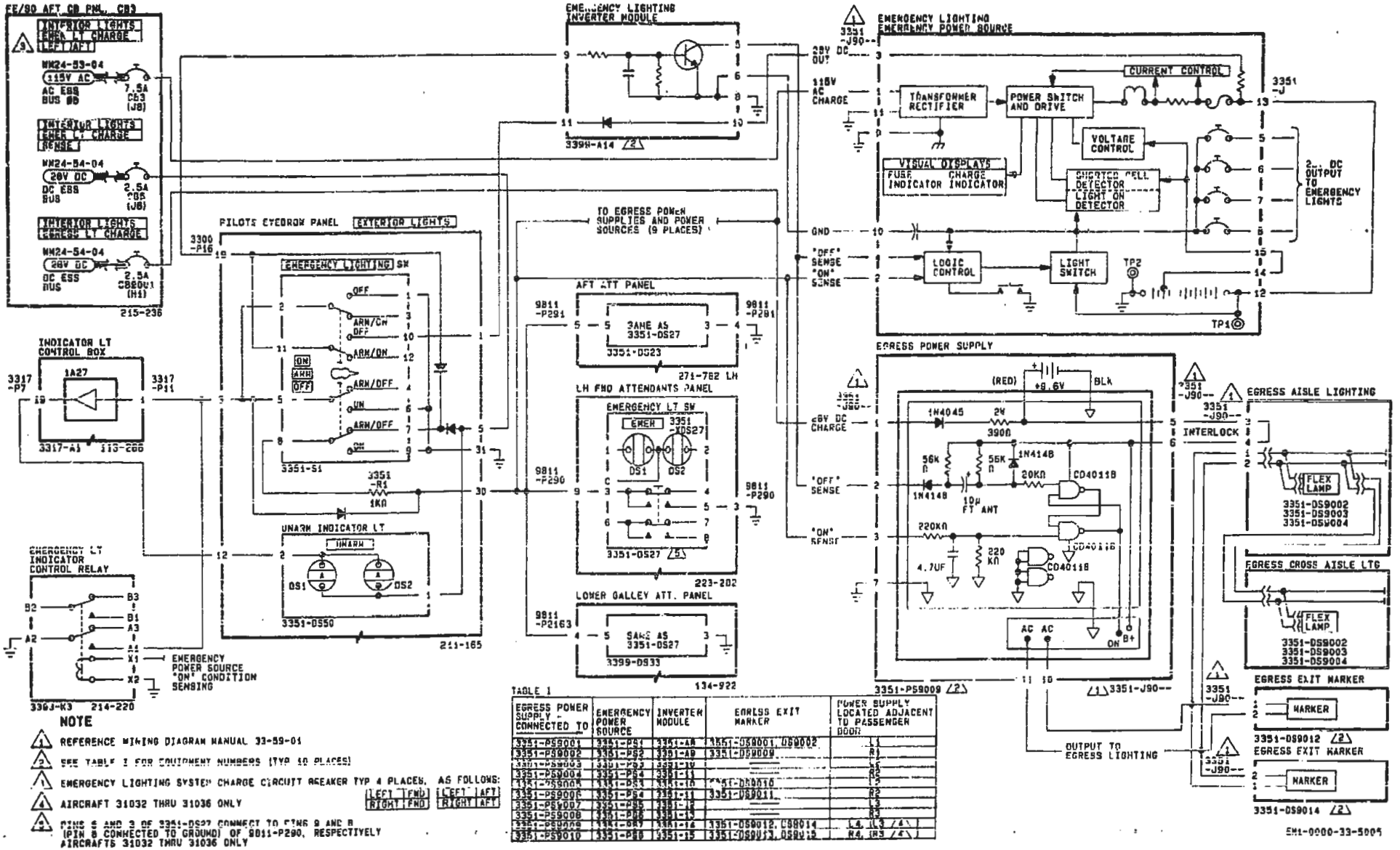

TABLE 1

EGRESS POWER SUPPLY - CONNECTED TO	EMERGENCY POWER SOURCE	INVERTER MODULE	EGRESS EXIT MARKER	POWER SUPPLY LOCATED ADJACENT TO PASSENGER DOOR
3351-PS9001	3351-PS1	3351-A8	3351-DS9001, DS9002	L1
3351-PS9002	3351-PS2	3351-A9	3351-DS9009	R1
3351-PS9003	3351-PS3	3351-A10		L2
3351-PS9004	3351-PS4	3351-11		R2
3351-PS9005	3351-PS5	3351-A6	3351-DS9010	L3
3351-PS9006	3351-PS6	3351-11	3351-DS9011	R3
3351-PS9007	3351-PS5	3351-12		L3
3351-PS9008	3351-PS6	3351-13		R3
3351-PS9009	3351-PS7	3351-14	3351-DS9012, DS9014	L4, L3 /4
3351-PS9010	3351-PS8	3351-15	3351-DS9013, DS9015	R4, R3 /4

NOTE

1. REFERENCE WIRING DIAGRAM MANUAL 33-59-01
2. SEE TABLE I FOR EQUIPMENT NUMBERS (TYP 10 PLACES)
3. EMERGENCY LIGHTING SYSTEM CHARGE CIRCUIT BREAKER TYP 4 PLACES, AS FOLLOWS: (LEFT FWD) (LEFT AFT) (RIGHT FWD) (RIGHT AFT)
4. AIRCRAFT 31032 THRU 31036 ONLY
5. PINS 6 AND 3 OF 3351-DS27 CONNECT TO PINS 9 AND 8 (PIN 8 CONNECTED TO GROUND) OF 9811-P290, RESPECTIVELY AIRCRAFTS 31032 THRU 31036 ONLY

CR CR

Emergency Egress Lighting Schematic
Figure 2

R EFFECTIVITY: ALL
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CR 3. Egress Power Supply

CR A. Each egress power supply (Ref. Figure 3) contains a nickel cadium battery, a battery charging circuit and logic and light switch circuits to monitor the aircraft dc essential power.

CR B. The power supply charging circuit maintains the power supply in a charged condition at all times during normal operation with aircraft power available. A completely discharged power supply will be restored to 100 percent capacity in 12 hours. The charging circuit is inhibited when the aircraft egress exit markers and egress aisle lighting are on.

CR C. The egress power supply switching logic is shown on Figure 4.

CR 4. Egress Exit Markers

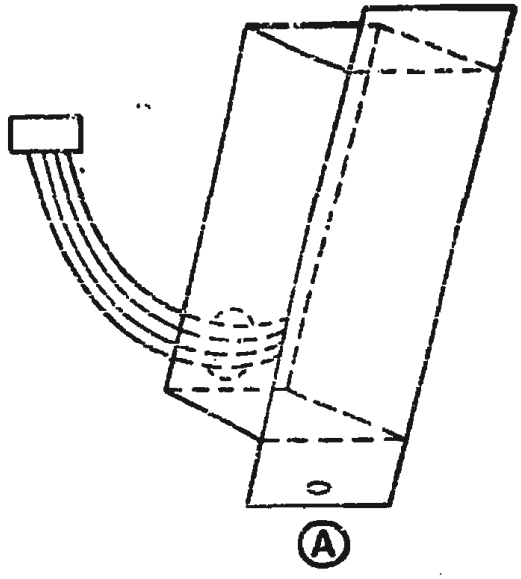
CR A. The emergency egress lighting system uses two types of egress exit markers. Both types are the same except one type has an arrow that points toward the exit.

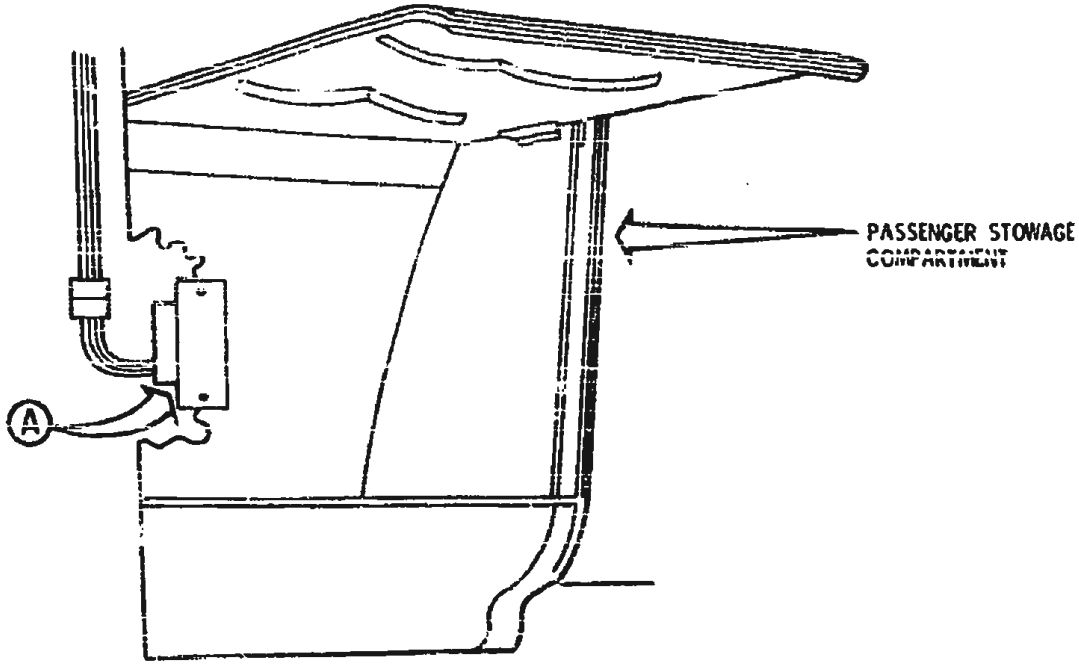
CR (1) Egress Exit Marker with Arrow.

CR (a) One egress exit marker with an arrow (Ref. Figure 5) is installed in the passenger compartment sidewall lining forward of the No. 1 right passenger door to show the exit location and illuminate the door entryway.

CR (2) Egress Exit Markers.

CR (a) Eight egress exit markers (Ref. Figure 5) are installed in the passenger compartment sidewall lining next to the passenger doors to show the exit location and illuminate the door entryway. Two are installed next to the left No. 1 passenger door and one next to each of the other passenger doors except the right No. 1 passenger door.





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Egress Power Supply
Figure 3

R EFFECTIVITY: ALL
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	PILOTS EMERGENCY LIGHTING SWITCH	UNARM ANNUNC LIGHT	CABIN ATTEND SWITCH ACTUATED	AIRCRAFT POWER (DC - ESSENTIAL)	EGRESS EXIT MARKERS AND EGRESS AISLE LIGHTS	POWER SUPPLY CHARGING
1	OFF	ON	NO	ON	OFF	YES
2	ON	ON	(1)	ON	ON	NO
3	ARM	OFF	NO	ON	OFF	YES
4	OFF	ON (2)	NO	OFF	OFF	NO
5	ON	ON (2)	(1)	OFF	ON	NO
6	ARM	OFF	YES	OFF	ON	NO
7	OFF (3)	ON	YES	ON	ON (3)	NO
8	ON	ON	(1)	ON	ON	NO
9	ARM (4)	OFF	YES	ON	ON (4)	NO
10	OFF	ON (2)	YES	OFF	ON	NO
11	ON	ON (2)	(1)	OFF	ON	NO
12	ARM	OFF	YES	OFF	ON	NO

(1) CABIN ATTENDANT SWITCH POSITION HAS NO EFFECT ON LIGHTING MODE

(2) LIGHT WILL BE ON ONLY IF DC-ESSENTIAL POWER IS AVAILABLE

(3) SETTING SWITCH TO ARM THEN BACK TO OFF WILL TURN LIGHTS OFF

(4) SETTING EMERGENCY LIGHTING SWITCH TO OFF THEN BACK TO ARM WILL TURN LIGHTS OFF

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Egress Power Supply Switching Logic
Figure 4

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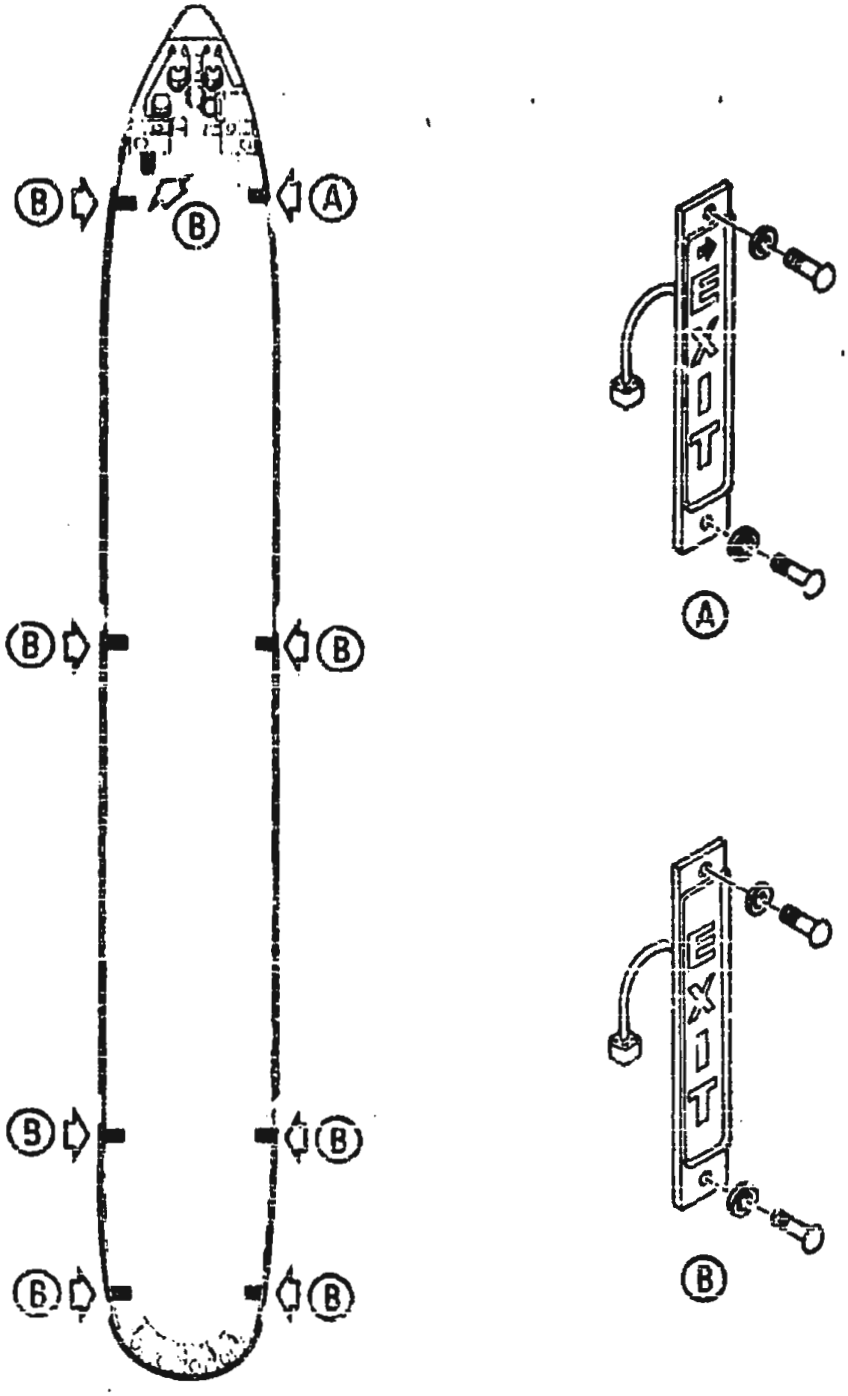

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Egress Exit Marker
Figure 5

R EFFECTIVITY: ALL
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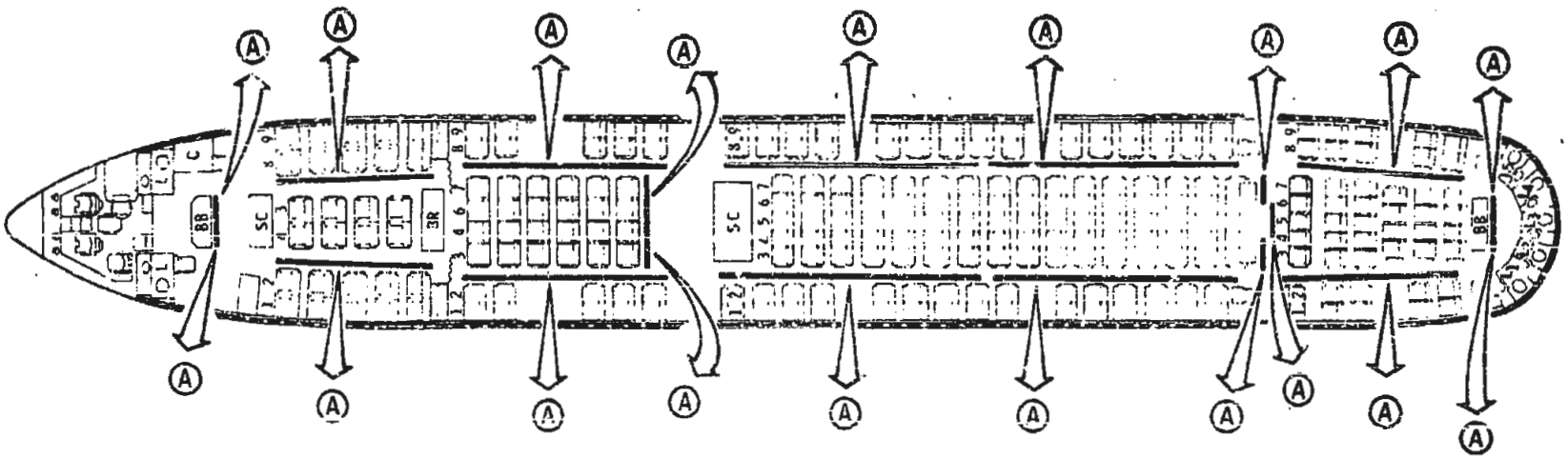
CR 5. Egress Aisle Lighting

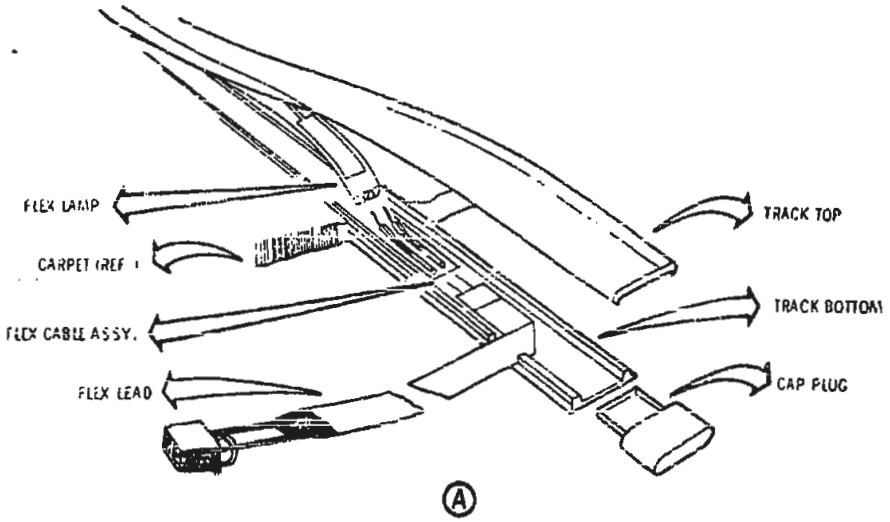
CR A. The egress aisle lighting is installed in the passenger cabin on the floor panels, along the inboard side of the left and right outboard passenger seats and in the cross aisles between the passenger cabin doors (Ref. Figure 6).

CR (1) Description

CR (a) The egress aisle lighting consists of light tracks, light track covers, flex cable assemblies, flex cable leads, flex cables, flex lamps, cap plugs and expansion caps.

CR (b) The light tracks are installed on the floor panels with double faced tape. The flex cable assemblies are installed in the light tracks with double faced tape, and the flex lamps plug into the flex cable assemblies. The cap plugs are installed in the ends of the light track and the light track covers are installed on the light track for protection of the flex cable assemblies and flex lamps, and serves as a light lens. The flex cable leads are connected to the aircraft wiring and the flex cables assemblies, and supply electrical power to the flex lamps through the flex cable assemblies. The flex leads connect egress aisle lighting in the cross aisles to the egress aisle lighting along the passenger seats. The expansion caps are used to cover breakes in the light track covers.





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Egress Aisle Lighting
Figure 6

R EFFECTIVITY: ALL
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CR # EMERGENCY EGRESS LIGHTING SYSTEM - FAULT ISOLATION

CR 2. General

CR Reference data and fault isolation procedures for troubleshooting Emergency Egress Lighting System faults are included in this section of the manual. An Emergency Egress Lighting system malfunction detected by the flight crew is normally entered in the aircraft flight log book and reported to maintenance personnel by a FIRM fault code. This fault code and the flight log book report can be found in the Chapter 33 Fault Code Index. The index specifies the maintenance manual section, fault isolation diagram figure number and, where appropriate, a fault number indicating the diagram entry point containing the fault isolation procedure. When no fault number is specified, use schematic diagrams, identified by a SCHEM number, supplement fault isolation procedures as maintenance aids. The schematics show the basic system circuitry necessary for troubleshooting and including cross-reference indexes to the wiring manual pages required for checking component interconnect wiring.

CR 2. Fault Isolation Identification

CR Table 101 is a list of the Emergency Egress Lighting System fault isolation diagrams and schematics. Figure 101 and 102 provide component location for troubleshooting.

CR CAUTION: REMOVAL OF THE PILOTS EYEBROW EMERGENCY LIGHTING PANEL WILL REMOVE THE DC BUS SENSING GROUND TO THE POWER SUPPLIES. IF THE EMERGENCY LIGHTING PANEL IS TO BE REMOVED FOR MAINTENANCE, PULL ALL POWER SUPPLY CIRCUIT BREAKERS, CB 1-4, TO PREVENT THE POWER SUPPLY BATTERIES FROM DISCHARGING. RESET THE CIRCUIT BREAKERS AFTER REINSTALLATION OF THE EMERGENCY LIGHTING PANEL.

CR TABLE 101

FIGURE	TITLE
101	Component Location Index
102	Component Locator Diagram
103	Emergency Egress Lighting System Fault Isolation
SCHEM 1	Emergency Egress Lighting System Schematic

COMPONENT	QTY	AREA/ACCESS	REFERENCE
CIRCUIT BREAKERS:			
EMER LT CHARGE – LEFT AFT 3351-CB3	1	FLT STA/CB3-J8	*
EMER LT CHARGE – LEFT FWD 3351-CB4	1	FLT STA/CB3-J7	*
EMER LT CHARGE – RIGHT AFT 3351-CB2	1	FLT STA/CB3-J10	*
EMER LT CHARGE – RIGHT FWD 3351-CB1	1	FLT STA/CB3-J9	*
EMER LT CHARGE – SENSE 3351-CB5	1	FLT STA/CB1-K14	*
EMER LT CHARGE 3351-CB8001	1	FLT STA/CB3-H1	*
LIGHTING – EGRESS AISLE	**	INSTALLED ON PASSENGER CABIN FLOOR IN AISLES ADJACENT TO OUTBOARD PASSENGER SEATS AND IN CROSS AISLES BETWEEN PASSENGER DOORS: L1-R1, L2-R2, L3-R3, L4-R4	33-53-04
MARKER – EGRESS EXIT	9	SIDEWALL PANELS AT PASSENGER CABIN DOORS	33-59-01
SUPPLY – EMERGENCY POWER	10	OUTBOARD OVERHEAD PASSENGER STOWAGE COMPARTMENTS ADJACENT TO PASSENGER DOORS	33-59-02

* SEE WM EQUIPMENT LIST
** REFERENCE "EGRESS AISLE LIGHTING INSTALLATION" (MM 33-59-05, PAGE 401) PROCEDURE M1-0000-33-5010

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Component Location Index
Figure 101

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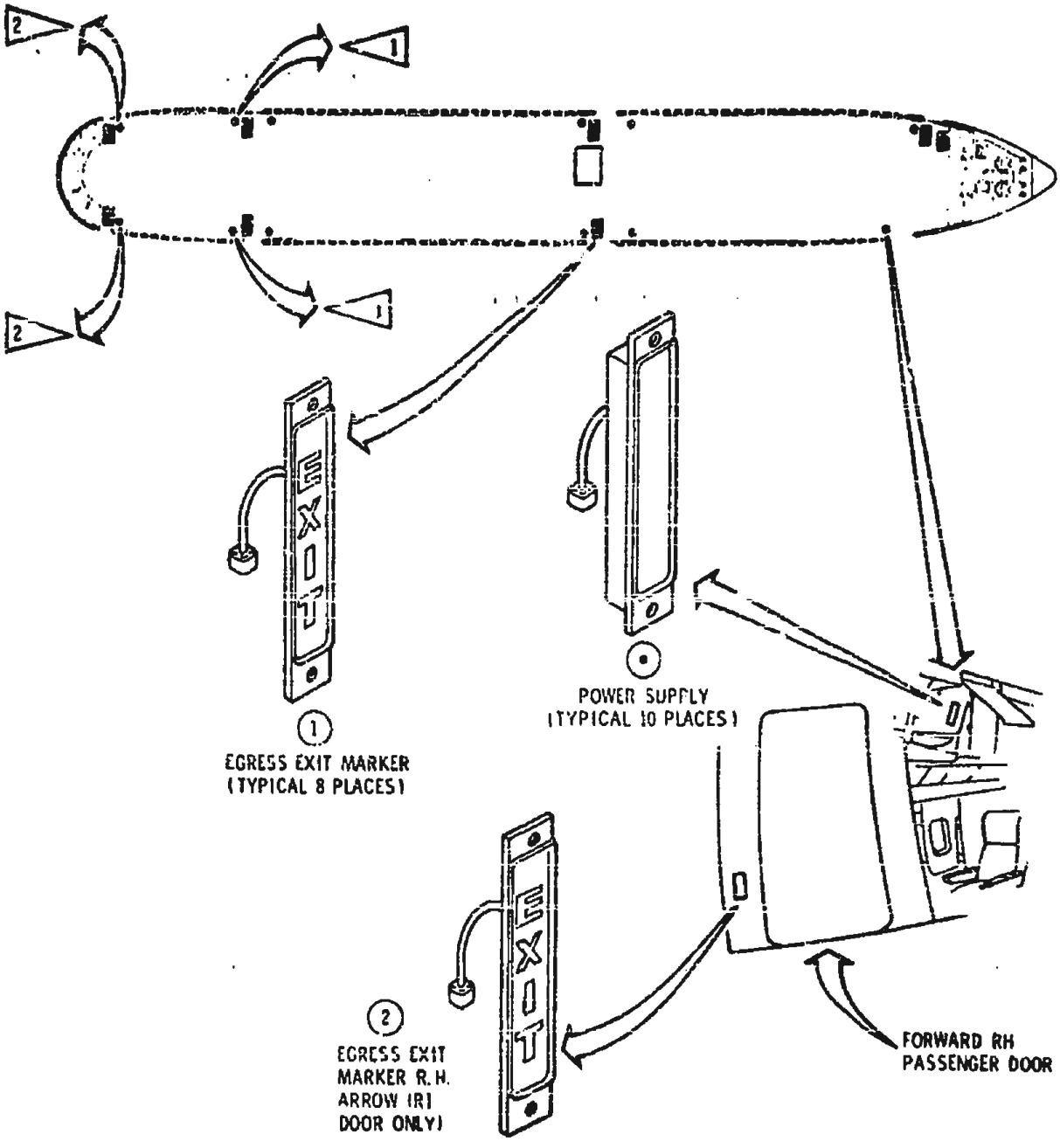

NOTE

1 ON AIRCRAFT 31032 THRU 31050 ONLY.

2 ON AIRCRAFT 11001 THRU 31031

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CR Egress Exit Marker, Egress Aisle Lighting and Power
CR Supply Locations
CR Figure 102 (Sheet 1 of 4)

R EFFECTIVITY: ALL
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0018

POWER SUPPLY NO. 3351-( )	POWER SUPPLY LOCATION	EGRESS EXIT MARKER NO. 3351-( )	EGRESS EXIT MARKER LOCATION	EGRESS AISLE LIGHTING LOCATION	EGRESS AISLE (CROSS-AISLE) LIGHTING LOCATION
PS9001	FORWARD LH PASSENGER DOOR (L1)	DS9001 AND DS9008	FORWARD LH PASSENGER DOOR (L1)	ZONE "A" LH AISLE	
PS9002	FORWARD RH PASSENGER DOOR (R1)	DS9009	FORWARD RH PASSENGER DOOR (R1)	ZONE "A" RH AISLE	AISLE BETWEEN PASSENGER DOORS (L1-R1)
PS9003	CENTER LH PASSENGER DOOR (L2) FORWARD			ZONE "C" LH AISLE	AISLE (LH) BETWEEN PASSENGER DOORS (L2-R2)
PS9004	CENTER RH PASSENGER DOOR (R2) FORWARD			ZONE "C" RH AISLE	AISLE (RH) BETWEEN PASSENGER DOORS (L2-R2)
PS9005	CENTER LH PASSENGER DOOR (L2) AFT	DS9010	CENTER LH PASSENGER DOOR (L2)	ZONE "D" LH AISLE FORWARD	
PS9006	CENTER RH PASSENGER DOOR (R2) AFT	DS9011	CENTER RH PASSENGER DOOR (R2)	ZONE "D" RH AISLE-FORWARD	
PS9007	AFT LH PASSENGER DOOR (L3) FORWARD			ZONE "D" LH AISLE-AFT	AISLE (LH) BETWEEN PASSENGER DOORS (L3-R3)

1 ON AIRCRAFT 31032 THRU 31036 ONLY.

2 ON AIRCRAFT 11001 THRU 31031 ONLY.

CR Egress Exit Marker, Egress Aisle Lighting and Power
CR Supply Locations
CR Figure 102 (Sheet 2 of 4)

R EFFECTIVITY: ALL
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POWER SUPPLY NO. 3351-( )	POWER SUPPLY LOCATION	EGRESS EXIT NO. 3351-( )	EGRESS EXIT MARKER LOCATION	EGRESS AISLE LIGHTING LOCATION	EGRESS AISLE (CROSS-AISLE) LIGHTING LOCATION
PS9008	AFT RH PASSENGER DOOR (R3) FORWARD			ZONE "D" RH AISLE-AFT	AISLE (RH) BETWEEN PASSENGER DOORS (L3-R3)
PS9009	AFT LH PASSENGER DOOR (L3) AFT	DS9012 AND DS9014	AFT LH PASSENGER DOOR (L3) & AFT LH EMERGENCY DOOR (L4)	ZONE "E" LH AISLE	AISLE (LH) BETWEEN EMERGENCY DOORS (L4-R4)
PS9009	AFT LH PASSENGER DOOR (L4) FORWARD	DS9012 AND DS9014	AFT LH PASSENGER DOOR (L3) & AFT LH EMERGENCY DOOR (L4)	ZONE "E" LH AISLE	AISLE (LH) BETWEEN EMERGENCY DOORS (L4-R4)
PS9010	AFT RH PASSENGER DOOR (R3) AFT	DS9013 AND DS9015	AFT RH PASSENGER DOOR (R3) & AFT RH EMERGENCY DOOR (R4)	ZONE "E" RH AISLE	AISLE (RH) BETWEEN EMERGENCY DOORS (L4-R4)
PS9010	AFT RH PASSENGER DOOR (R4) FORWARD	DS9013 AND DS9015	AFT RH PASSENGER DOOR (R3) & AFT RH EMERGENCY DOOR (R4)	ZONE "E" RH AISLE	AISLE (RH) BETWEEN EMERGENCY DOORS (L4-R4)

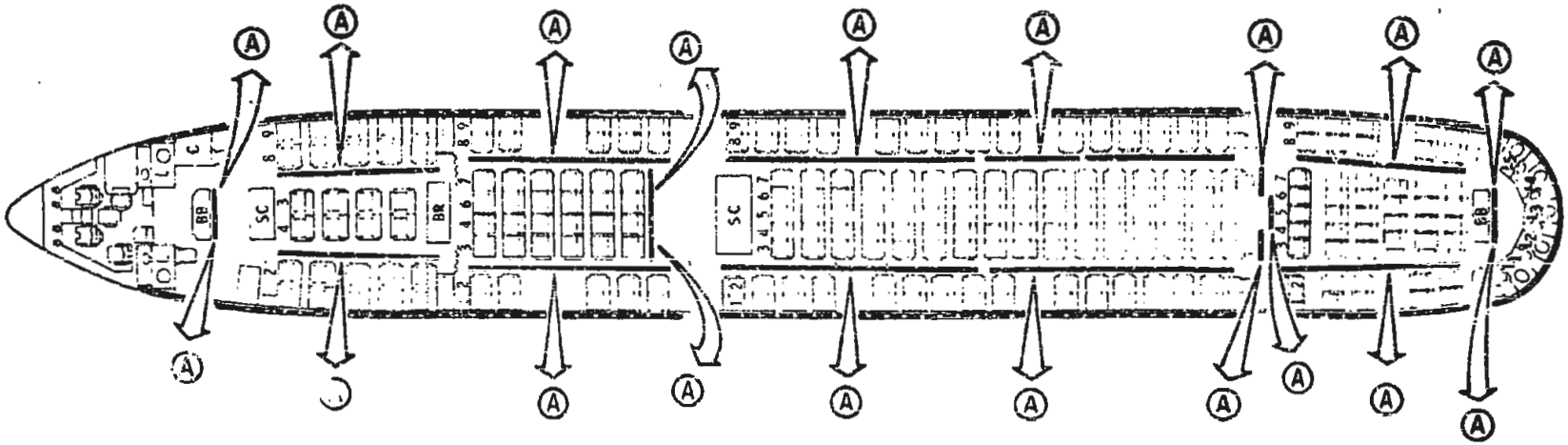
1 ON AIRCRAFT 31032 THRU 31036 ONLY.

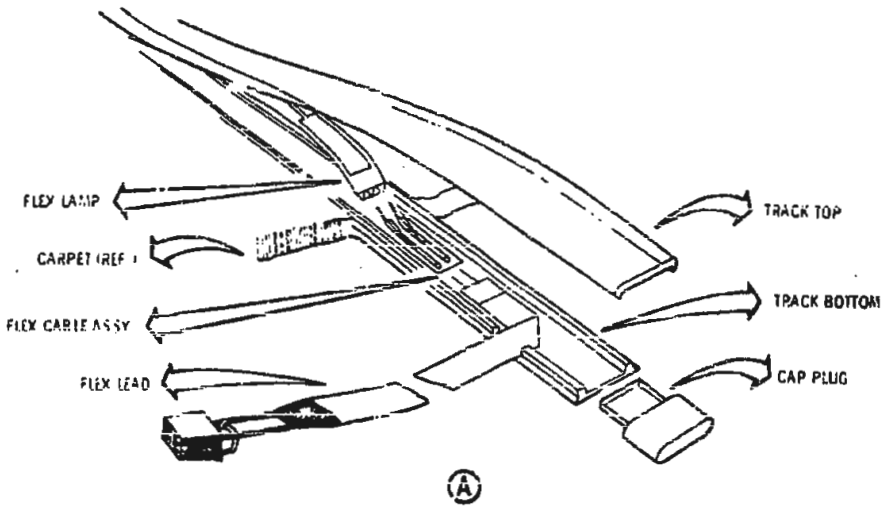
2 ON AIRCRAFT 11001 THRU 31031 ONLY.

M1-0000-33-5004

CR CR CR Egress Exit Marker, Egress Aisle Lighting and Power Supply Locations
Figure 102 (Sheet 3 of 4)

R R 001B EFFECTIVITY: ALL





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CR Egress Exit Marker, Egress Aisle Lighting and Power
CR Supply Locations
CR Figure 102 (Sheet 4 of 4)

R EFFECTIVITY: ALL
R
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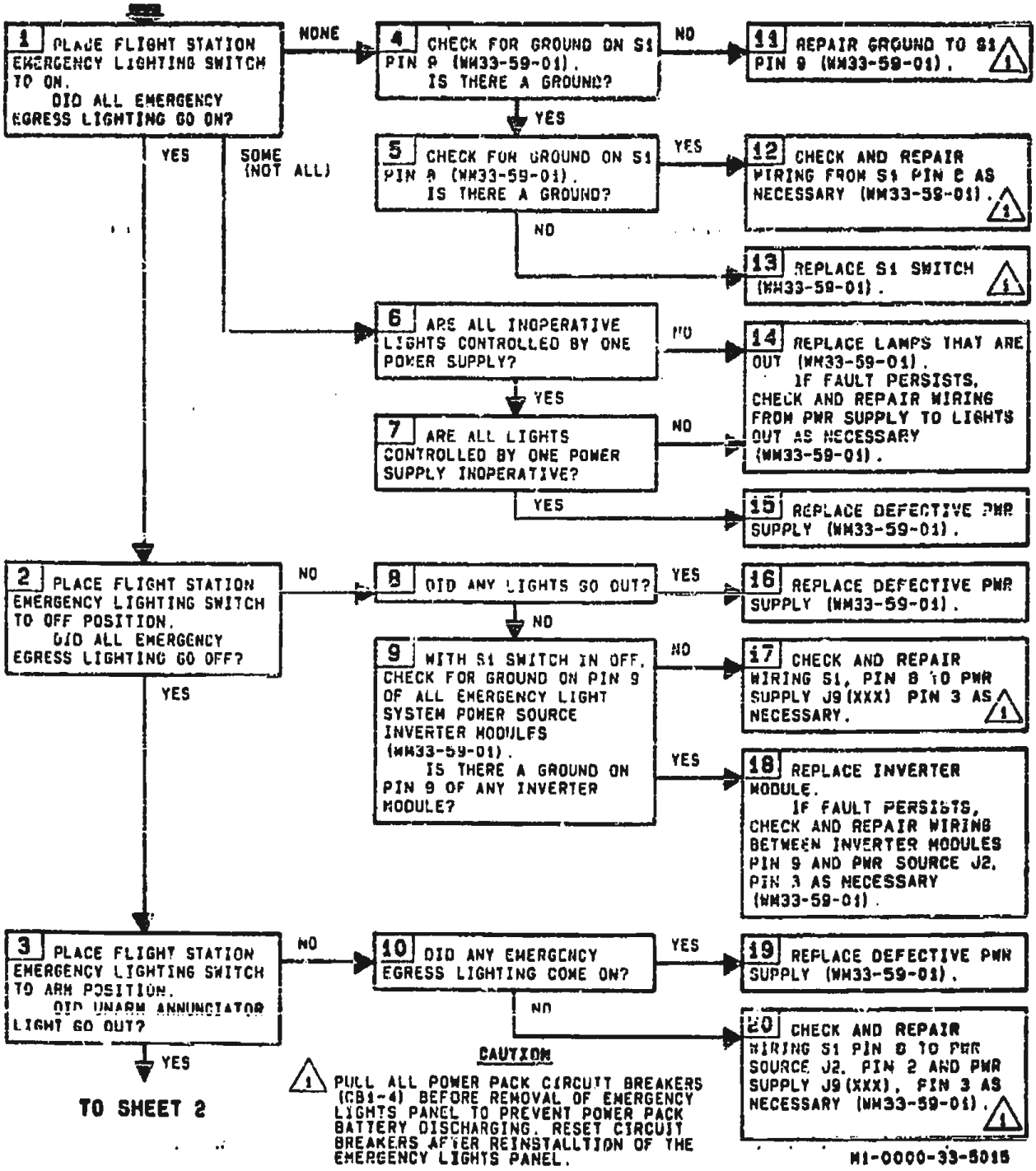
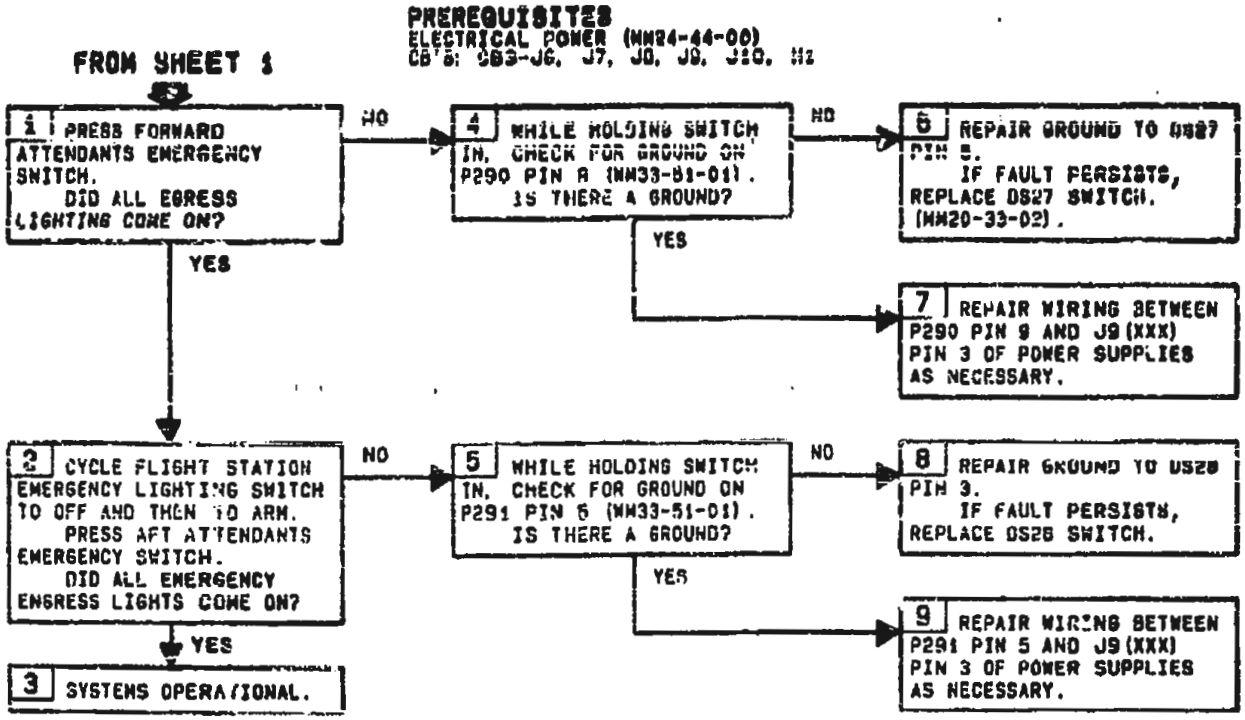
EMERGENCY EGRESS LIGHTING SYSTEM FAULT ISOLATION CHECKOUT

PREREQUISITES
ELECTRICAL POWER (MM24-44-00)
CB'S: CB3-16, J7, J8, J9, J10, H1


1 PLACE FLIGHT STATION EMERGENCY LIGHTING SWITCH TO ON. DID ALL EMERGENCY EGRESS LIGHTING GO ON?
NONE
SOME (NOT ALL)
YES
4 CHECK FOR GROUND ON S1 PIN 9 (MM33-59-01). IS THERE A GROUND?
NO
11 REPAIR GROUND TO S1 PIN 9 (MM33-59-01). 1
YES
5 CHECK FOR GROUND ON S1 PIN 8 (MM33-59-01). IS THERE A GROUND?
YES
12 CHECK AND REPAIR WIRING FROM S1 PIN C AS NECESSARY (MM33-59-01). 1
NO
13 REPLACE S1 SWITCH (MM33-59-01). 1
6 ARE ALL INOPERATIVE LIGHTS CONTROLLED BY ONE POWER SUPPLY?
NO
14 REPLACE LAMPS THAT ARE OUT (MM33-59-01). IF FAULT PERSISTS, CHECK AND REPAIR WIRING FROM PWR SUPPLY TO LIGHTS OUT AS NECESSARY (MM33-59-01).
YES
7 ARE ALL LIGHTS CONTROLLED BY ONE POWER SUPPLY INOPERATIVE?
NO
YES
15 REPLACE DEFECTIVE PWR SUPPLY (MM33-59-01).
2 PLACE FLIGHT STATION EMERGENCY LIGHTING SWITCH TO OFF POSITION. DID ALL EMERGENCY EGRESS LIGHTING GO OFF?
NO
8 DID ANY LIGHTS GO OUT?
YES
16 REPLACE DEFECTIVE PWR SUPPLY (MM33-59-01).
NO
9 WITH S1 SWITCH IN OFF, CHECK FOR GROUND ON PIN 9 OF ALL EMERGENCY LIGHT SYSTEM POWER SOURCE INVERTER MODULES (MM33-59-01). IS THERE A GROUND ON PIN 9 OF ANY INVERTER MODULE?
NO
17 CHECK AND REPAIR WIRING S1, PIN B TO PWR SUPPLY J9(XXX) PIN 3 AS NECESSARY. 1
YES
18 REPLACE INVERTER MODULE. IF FAULT PERSISTS, CHECK AND REPAIR WIRING BETWEEN INVERTER MODULES PIN 9 AND PWR SOURCE J2, PIN 3 AS NECESSARY (MM33-59-01).
YES
3 PLACE FLIGHT STATION EMERGENCY LIGHTING SWITCH TO ARM POSITION. DID UNARM ANNUNCIATOR LIGHT GO OUT?
NO
10 DID ANY EMERGENCY EGRESS LIGHTING COME ON?
YES
19 REPLACE DEFECTIVE PWR SUPPLY (MM33-59-01).
NO
20 CHECK AND REPAIR WIRING S1 PIN B TO PWR SOURCE J2, PIN 2 AND PWR SUPPLY J9(XXX), PIN 3 AS NECESSARY (MM33-59-01). 1
YES
TO SHEET 2
CAUTION
1 PULL ALL POWER PACK CIRCUIT BREAKERS (CB1-4) BEFORE REMOVAL OF EMERGENCY LIGHTS PANEL TO PREVENT POWER PACK BATTERY DISCHARGING. RESET CIRCUIT BREAKERS AFTER REINSTALLTION OF THE EMERGENCY LIGHTS PANEL.
M1-0000-33-5015

CR CR Emergency Egress Light System Fault Isolation
Figure 103 (Sheet 1 of 2)


PREREQUISITES
ELECTRICAL POWER (MM24-44-00)
CB'S: C83-J6, J7, J8, J9, J10, H2
FROM SHEET 1
1 PRESS FORWARD ATTENDANTS EMERGENCY SWITCH.
DID ALL EGRESS LIGHTING COME ON?
NO
YES
4 WHILE HOLDING SWITCH IN, CHECK FOR GROUND ON P290 PIN 8 (MM33-51-01).
IS THERE A GROUND?
NO
YES
6 REPAIR GROUND TO DS27 PIN 8.
IF FAULT PERSISTS, REPLACE DS27 SWITCH. (MM20-33-02).
7 REPAIR WIRING BETWEEN P290 PIN 8 AND J9(XXX) PIN 3 OF POWER SUPPLIES AS NECESSARY.
2 CYCLE FLIGHT STATION EMERGENCY LIGHTING SWITCH TO OFF AND THEN TO ARM.
PRESS AFT ATTENDANTS EMERGENCY SWITCH.
DID ALL EMERGENCY EGRESS LIGHTS COME ON?
NO
YES
5 WHILE HOLDING SWITCH IN, CHECK FOR GROUND ON P291 PIN 5 (MM33-51-01).
IS THERE A GROUND?
NO
YES
8 REPAIR GROUND TO DS28 PIN 3.
IF FAULT PERSISTS, REPLACE DS28 SWITCH.
9 REPAIR WIRING BETWEEN P291 PIN 5 AND J9(XXX) PIN 3 OF POWER SUPPLIES AS NECESSARY.
3 SYSTEMS OPERATIONAL.

M1-0000-33-5018

CR
CR
Emergency Egress Light System Fault Isolation
Figure 103 (Sheet 2 of 2)

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EFFECTIVITY: ALL

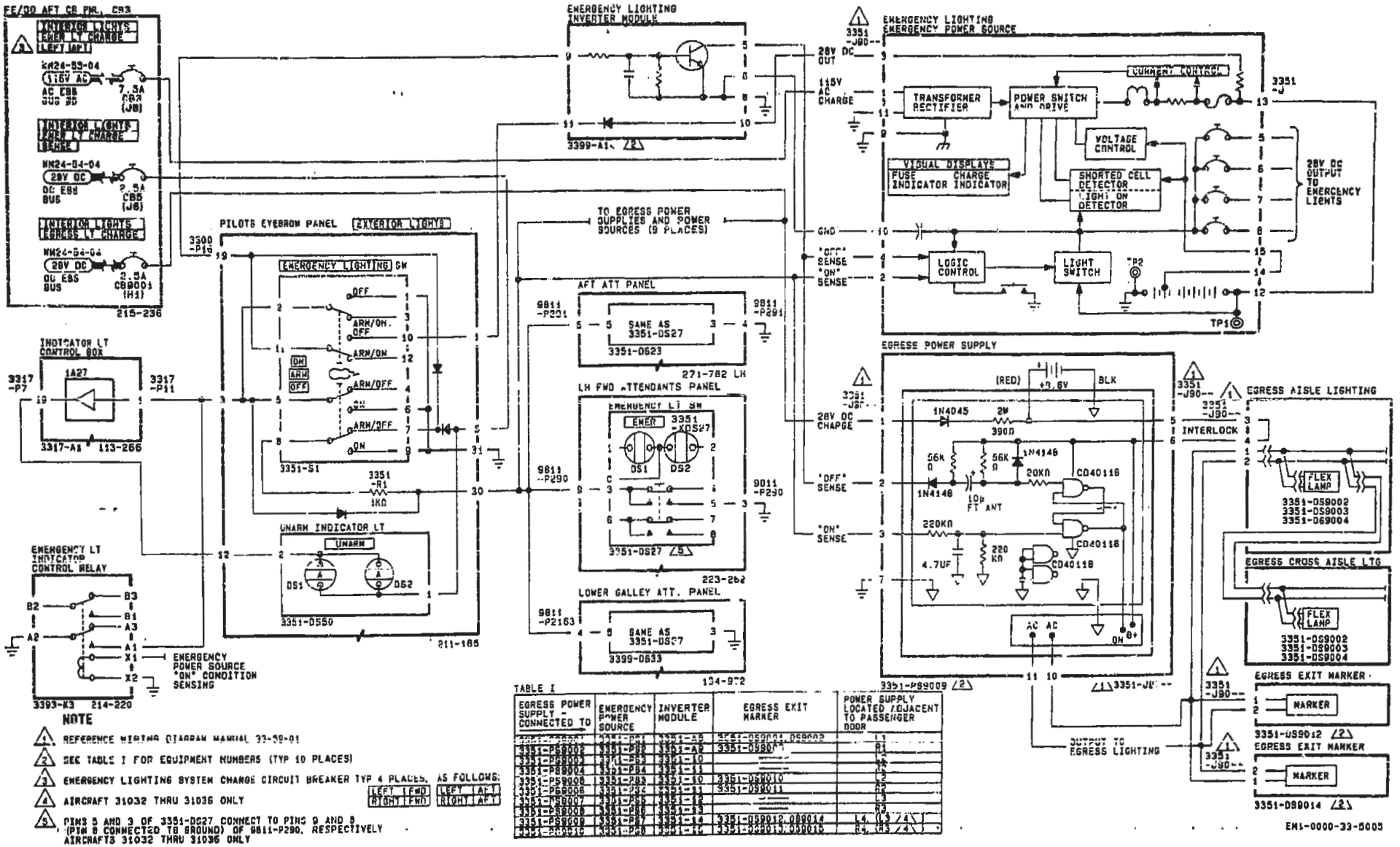


TABLE I

EGRESS POWER SUPPLY - CONNECTED TO	EMERGENCY POWER SOURCE	INVERTER MODULE	EGRESS EXIT MARKER	POWER SUPPLY LOCATED ADJACENT TO PASSENGER DOOR
3351-P89001	3351-P81	3351-A5	3351-DS9001, DS9003	1
3351-P89002	3351-P82	3351-A9	3351-DS9011	81
3351-P89003	3351-P83	3351-10		82
3351-P89004	3351-P84	3351-11		2
3351-P89005	3351-P85	3351-12	3351-DS9010	3
3351-P89006	3351-P86	3351-13	3351-DS9011	4
3351-P89007	3351-P87	3351-14		5
3351-P89008	3351-P88	3351-15		80
3351-P89009	3351-P89	3351-16	3351-DS9012, DS9014	14 (3) (4)
3351-P89010	3351-P90	3351-17	3351-DS9013, DS9015	84, 85 (4)

NOTE

1. REFERENCE WIRING DIAGRAM MANUAL 33-59-01
2. SEE TABLE I FOR EQUIPMENT NUMBERS (TYP 10 PLACES)
3. EMERGENCY LIGHTING SYSTEM CHARGE CIRCUIT BREAKER TYP 4 PLACES, AS FOLLOWS: LEFT FWD, RIGHT FWD, LEFT AFT, RIGHT AFT
4. AIRCRAFT 31032 THRU 31036 ONLY
5. PINS 5 AND 3 OF 3351-DS27 CONNECT TO PINS 9 AND 8 (PIN 8 CONNECTED TO GROUND) OF 9811-P290, RESPECTIVELY AIRCRAFTS 31032 THRU 31036 ONLY

CR CR

Emergency Egress Lighting Schematic
SCHEM 1

R R 001B EFFECTIVITY: ALL

CR # EMERGENCY EGRESS LIGHTING SYSTEM - ADJUSTMENT TEST

CR 1. Reference Procedure

CR 24-00-00 Electrical Power - Maintenance Practices

CR 33-51-00 Emergency Lighting System - Adjustment and Test

CR 2. Adjustment/Test

CR NOTE: During this test, do not electrically operate the
CR passenger doors.

CR NOTE: Emergency exit lights will come-on/go-off at the same
CR time the egress exit markers and egress aisle lighting
CR come-on/go-off.

CR NOTE: To prevent discharging the emergency exit light power
CR sources and egress lighting system power supplies,
CR accomplish adjustment/test with lights on time as short
CR as possible.

CR A. Operational Test

CR (1) Turn on electrical power (Ref. 24-00-00).

CR (2) On Flight Engineer/Second Officers (FE/SO) art circuit
CR breaker panel CB3, Zone 215, verify that the following
CR circuit breakers are closed:

CR EMER LT CHARGE SENSE (J6)

CR EMER LT CHARGE LEFT FWD (J7)

CR EMER LT CHARGE LEFT AFT (J8)

CR EMER LT CHARGE RIGHT FWD (J9)

CR EMER LT CHARGE RIGHT AFT (J10)

CR EGRESS LT CHARGE (H1)

CR (3) On eyebrow panel, Zone 210, verify that EMERGENCY
CR LIGHTING switch is in the OFF position; verify that
CR UNARM annunciator light is on.

CR (4) On eyebrow panel, place EMERGENCY LIGHTING switch in the ON position; verify that all the egress exit markers and egress aisle lighting come on, and UNARM annunciator light remains on.

CR NOTE: Emergency Exit Lights will also come on.

CR (5) Place EMERGENCY LIGHTING switch in the OFF position; verify that all the egress exit markers and egress aisle lighting go off, and UNARM annunciator light remains on.

CR (6) Place EMERGENCY LIGHTING switch in the ARM position; verify that UNARM annunciator light goes off.

CR (7) On FE/SO ELECTRICAL panel, verify that BATTERY switch is in the ON position.

CR (8) On FE/SO aft circuit breaker panel CB3, open the EMER LT CHARGE SENSE (J6) circuit breaker; verify that all the egress exit markers and egress aisle lighting come on.

CR (9) Close EMER LT CHARGE SENSE (J6) circuit breaker [opened in Step 2.A.(8)].

CR (10) Place EMERGENCY LIGHTING switch in the OFF position; verify that all the egress exit markers and egress aisle lighting go off, and UNARM annunciator light comes on.

CR (11) Place EMERGENCY LIGHTING switch in the ARM position and allow the emergency lights system power sources and the emergency egress lighting system power supplies to recharge until all amber charging lights on emergency exit lights system power sources go off.

CR (12) Place EMERGENCY LIGHTING and BATTERY switches to the OFF positions.

CR (13) Turn off electrical power (Ref. 24-00-00).

CR B. Functional Test

CR (1) Turn on electrical power (Ref. 24-00-00).

CR (2) On Flight Engineer/Second Officers (FE/SO) aft circuit breaker panel CB3, Zone 215, verify that the following circuit breakers are closed:

CR EMER LT CHARGE SENSE (J6)

CR EMER LT CHARGE LEFT FWD (J7)

CR EMER LT CHARGE LEFT AFT (J8)

CR EMER LT CHARGE RIGHT FWD (J9)

CR EMER LT CHARGE RIGHT AFT (J10)

CR EGRESS LT CHARGE (H1)

CR (3) On eyebrow panel, Zone 210, verify that EMERGENCY LIGHTING switch is in the OFF position; verify that UNARM annunciator light is on.

CR (4) On eyebrow panel, place EMERGENCY LIGHTING switch in the ON position; verify that all the egress exit markers and egress aisle lighting come on, and UNARM annunciator light remains on.

CR NOTE: Emergency Exit lights will also come on.

CR (5) Place EMERGENCY LIGHTING switch in the OFF position; verify that all the egress exit markers and egress aisle lighting go off, and UNARM annunciator light remains on.

CR (6) Place EMERGENCY LIGHTING switch in the ARM position; verify that UNARM annunciator light goes off.

CR (7) Momentarily press forward cabin attendant EMER lights switch; verify that all the egress exit markers, egress aisle lighting and UNARM annunciator light all come on.

CR (8) Place EMERGENCY LIGHTING switch in the OFF position; verify that all the egress exit markers and egress aisle lighting go off, and UNARM annunciator light remains on.

CR (9) Momentarily press aft cabin attendant EMER lights switch; verify that all the egress exit markers and egress aisle lighting come on, and UNARM annunciator light remains on.

CR (10) Place EMERGENCY LIGHTING switch in the ARM position and
CR then in the OFF positions; verify that all the egress
CR exit markers and egress aisle lighting go off, and
CR UNARM annunciator light remains on.

CR (11) Momentarily press lower galley EMER lights switch;
CR verify that all the egress exit markers and egress
CR aisle lighting come on, and UNARM annunciator light
CR remains on.

CR (12) Place EMERGENCY LIGHTING switch in the ARM position and
CR then in the OFF position; verify that all the egress
CR exit markers and egress aisle lighting go off; and
CR UNARM annunciator light remains on.

CR (13) Place EMERGENCY LIGHTING switch in the ARM position;
CR verify that UNARM annunciator light goes off.

CR (14) On FE/SO ELECTRICAL panel, verify that BATTERY switch
CR is in the ON position.

CR (15) On FE/SO aft circuit breaker panel CB3, open DC TIE
CR BUS-PWR (F3) and ESS T/R PWR (F17) circuit breakers;
CR verify that all the egress exit markers and egress
CR aisle lighting come on.

CR NOTE: All markers and lights may not come on when the
CR circuit breakers are pulled. If all the egress
CR exit markers and egress aisle lighting are not
CR on, reset the circuit breakers, and remove
CR electrical power from the aircraft. All the
CR egress exit markers and egress aisle lighting
CR must now come on.

CR (16) Close circuit breakers (F3) and (F17) [opened in Step
CR 2.B.(15)].

CR (17) Place EMERGENCY LIGHTING switch in the OFF position;
CR verify that all the egress exit markers and egress
CR aisle lighting go off, and UNARM annunciator light
CR comes on.

CR (18) On aircraft with Gulton SB33-6, on FE/SO aft circuit
CR breaker panel CB3, open the EMER LT CHARGE SENSE (J6)
CR circuit breaker; verify that UNARM annunciator light
CR goes out.

CR (19) On aircraft with Gulton SB33-6, place the EMERGENCY LIGHTING switch in the ON position; verify that all the egress exit markers and egress aisle lighting come on, and UNARM annunciator light remains off.

CR (20) On aircraft with Gulton SB33-6, on FE/SO aft circuit breaker panel C83, close the EMER LT CHARGE SENSE (J6) circuit breaker.

CR NOTE: Gulton SB33-6 modifies the emergency lights system power sources to allow the power source battery to provide an alternate source of power for the 28 Vdc sense logic circuit. The alternate source of power allows the egress exit markers and egress aisle lighting to be manually turned on after they have been manually turned off and aircraft 28 Vdc essential bus sensing power is not available. The preceding three steps verify proper operation of this alternate sense power source function. This procedure can be accomplished on aircraft with at least one emergency lights system power source incorporating Gulton SB33-6. Incorporation of Gulton SB33-6 is indicated on the emergency exit system power source by removal of No. 7 from the change status decal. All EMBS 141 emergency power sources are covered by Gulton SB33-6. Incorporation may be determined by local airline inspection.

CR (21) Place EMERGENCY LIGHTING switch in the OFF position; verify that all the egress exit markers and egress aisle lighting go off.

CR (22) Place EMERGENCY LIGHTING switch in the ARM position and allow the emergency exit lights system power sources and the emergency egress lighting system power supplies to recharge until all amber charging lights on emergency exit lights system power sources go off.

CR (23) Place EMERGENCY LIGHTING and BATTERY switches to the OFF positions.

CR (24) Turn off electrical power (Ref. 24-00-00).

CR

EGRESS EXIT MARKER - REMOVAL AND ISTALLATION

CR 1. Removal/Installation

CR A. Removal

CR (1) On eyebrow panel, Zone 210, place EMERGENCY LIGHTING
CR switch in the OFF position and tag.

CR (2) Remove screws securing egress exit marker to sidewall
CR panel. Pull marker away from panel to gain access to
CR elecrical connector (Ref. Figure 401).

CR (3) Disconnect egress exit marker electrical connector from
CR aircraft electrical connector.

CR B. Installation

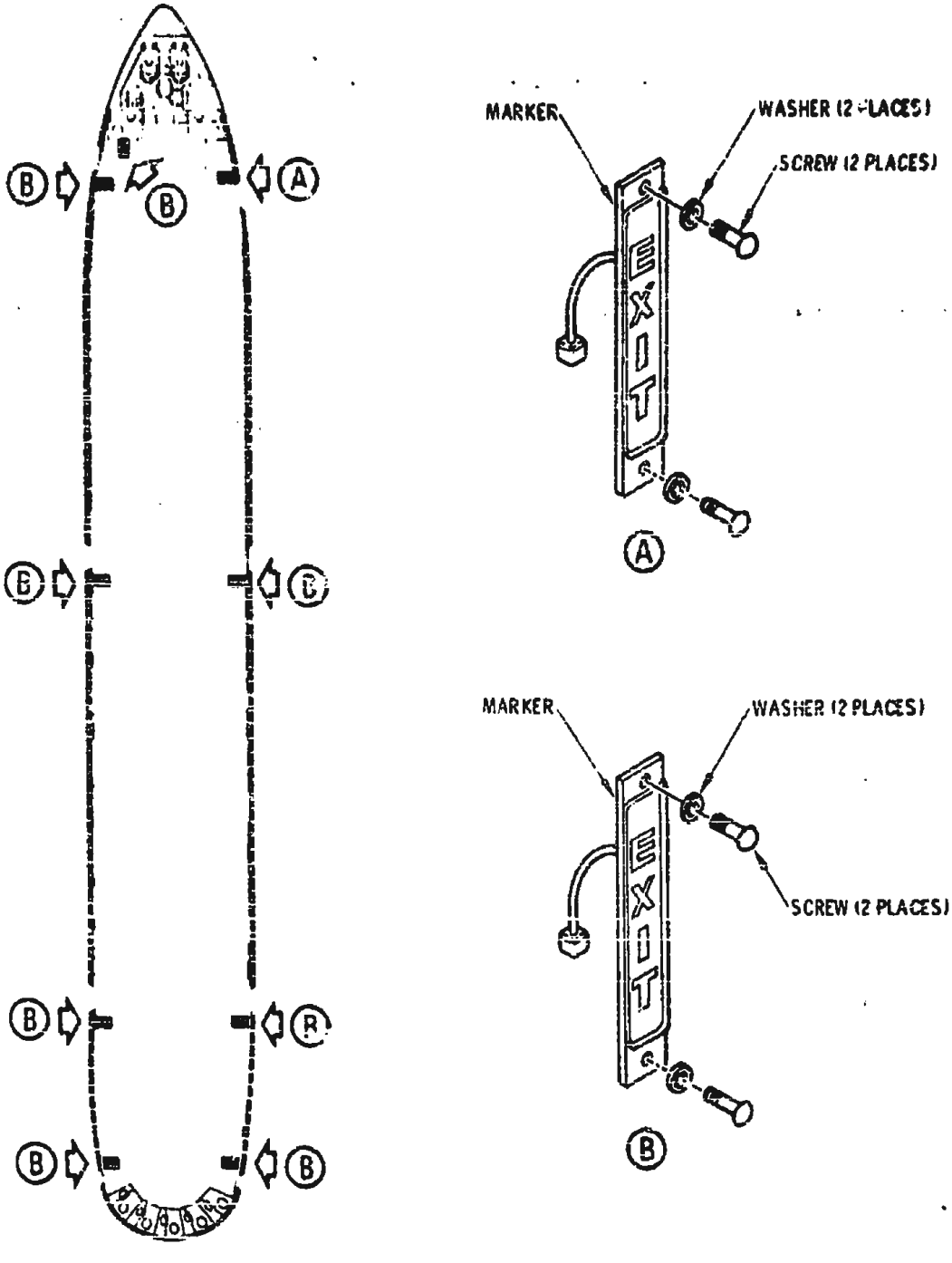
CR (1) On eyebrow panel, Zone 210, Place EMERGENCY LIGHTING
CR switch in the OFF position and tag.

CR (2) Connect egress exit marker electrical connector to
CR aircraft electrical connector (Ref. Figure 401).

CR (3) Position egress exit marker on sidewall panel (fairing)
CR and secure with screws.

CR (4) Remove tag from EMERGENCY LIGHTING switch.

CR (5) Test the Emergency Egress Lighting system per the
CR Emergency Egress Lighting System, Operational Test
CR (33-59-00).



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CR
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Emergency Exit Marker
Figure 401

R EFFECTIVITY: ALL
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001B

CR # EGRESS POWER SUPPLY - REMOVAL AND INSTALLATION

CR 1. Referenced Procedure

CR	24-41-00	External Power/Ground Service System - Maintenance Practices
CR	33-51-00	Emergency Lighting System - Adjustment and Test
CR	33-59-00	Emergency Egress Lighting System - Adjustment and Test

CR 2. Removal/Installation

CR A. Removal

CR (1) On eyebrow panel, Zone 210, place EMERGENCY LIGHTING switch in the OFF position and tag.

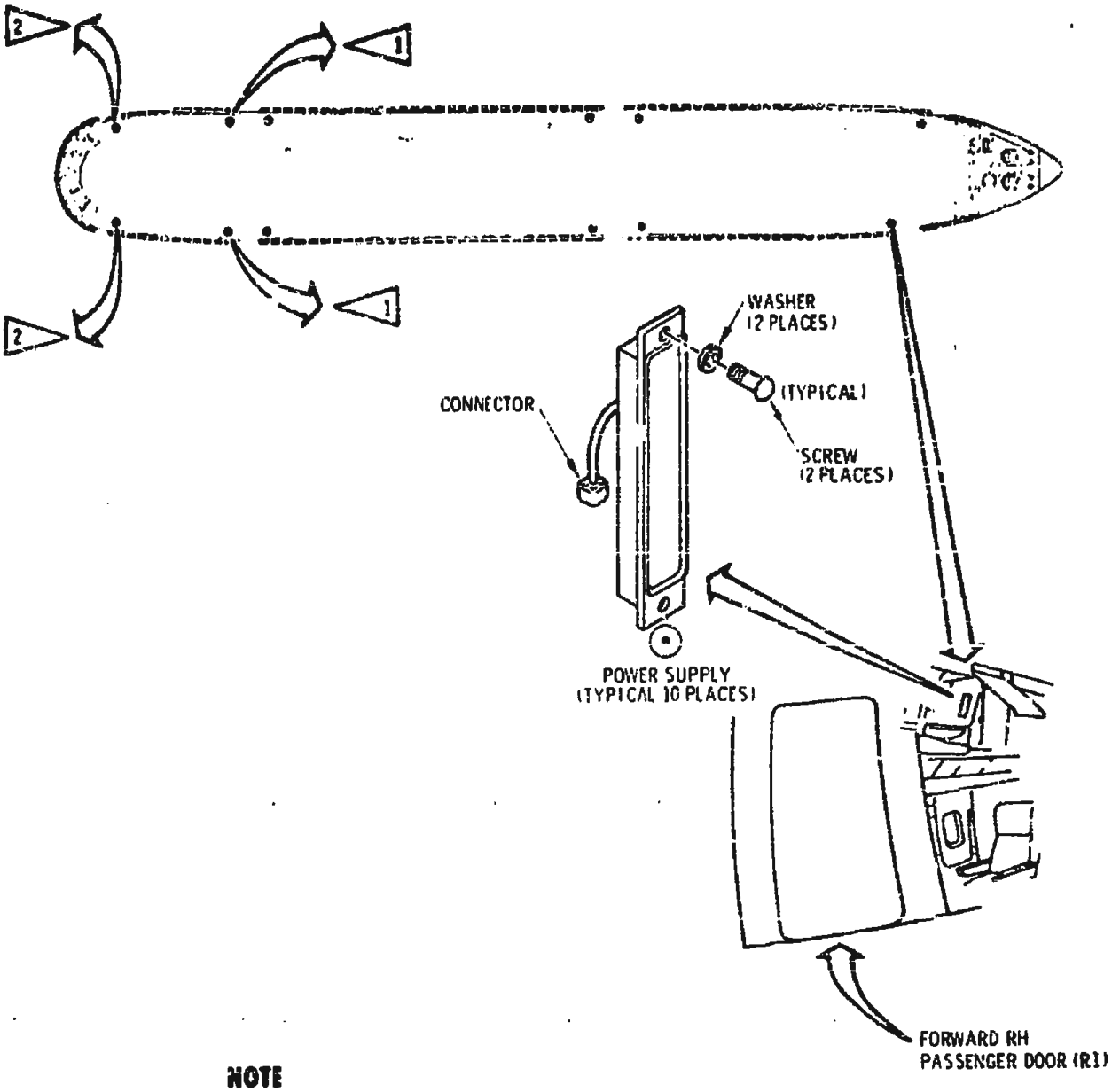
CR (2) On Flight Engineer/Second Officers aft circuit breaker panel CB3, Zone 215, open and tag the EGRESS LT CHARGE (H1) circuit breaker.

CR (3) Gain access to egress power supply (Ref. Figure 401).

CR NOTE: Egress power supplies are located in the end overhead passenger stowage compartments adjacent to each of the eight passenger doors.

CR (4) Remove screws securing egress power supply to the outboard panel of the passenger stowage compartment. Pull power supply away from panel to gain access to electrical connector (Ref. Figure 401).

CR (5) Disconnect egress power supply electrical connector from aircraft electrical connector.



NOTE

1 ON AIRCRAFT 31032 THRU 31036 ONLY

2 ON AIRCRAFT 31001 THRU 31031

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CR
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Egress Power Supply
Figure 401 (Sheet 1 of 2)

R EFFECTIVITY: ALL
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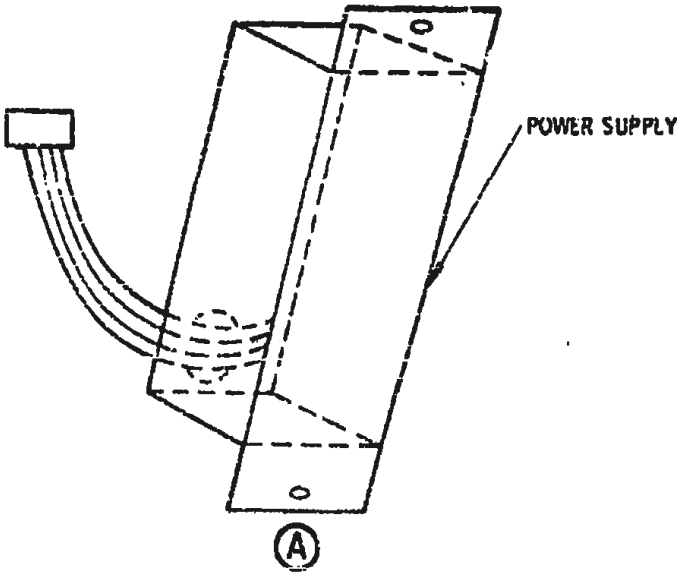

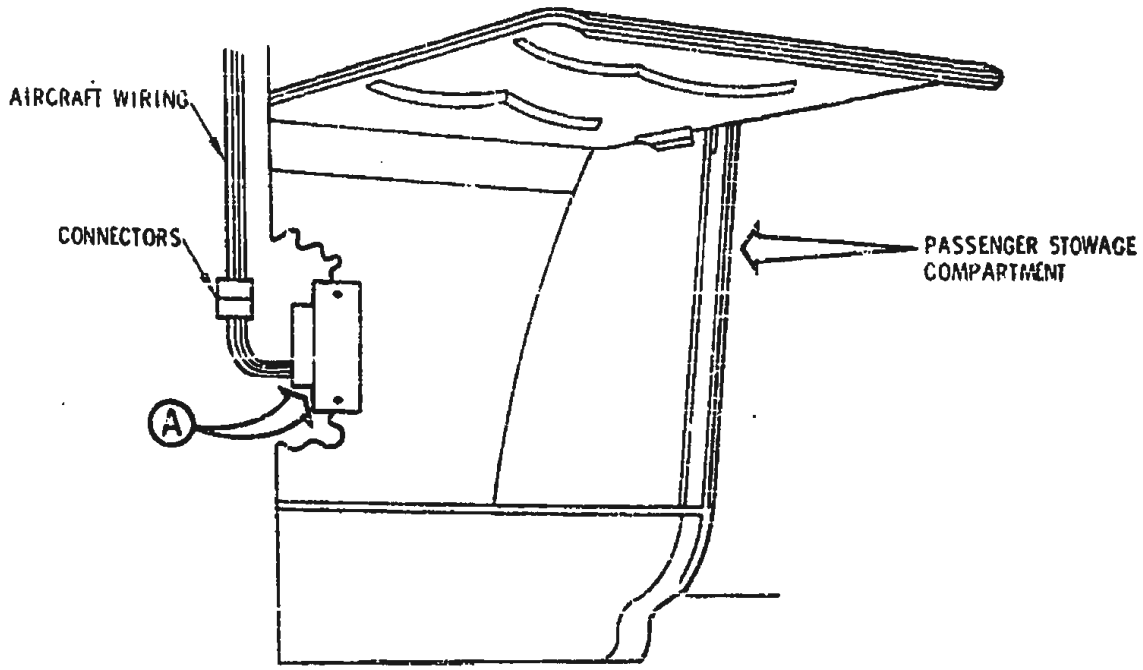

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CR
CR

Egress Power Supply
Figure 401 (Sheet 2 of 2)

R EFFECTIVITY: ALL
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001B

CR B. Installation

CR (1) On eyebrow panel, Zone 210, place EMERGENCY LIGHTING CR switch in the OFF position and tag.

CR (2) Verify that EGRESS LT CHARGE (H1) circuit breaker is CR open (opened in Step 2.A.(2)).

CR (3) Connect egress power supply electrical connector to CR aircraft electrical connector (Ref. Figure 401).

CR (4) Position egress power supply on outboard panel of the CR passenger stowage compartment and secure with screws.

CR (5) Remove tag and close EGRESS LT CHARGE (H1) circuit CR breaker (opened in Step 2.A.(2)).

CR (6) Test the Emergency Egress Lighting system per the CR Emergency Egress Lighting System, Operational Test CR (33-59-00).

CR

EGRESS POWER SUPPLY - ADJUSTMENT AND TEST

CR 1. Referenced Procedure

CR 24-00-00 Electrical Power - Maintenance Practices

CR 33-51-03 Emergency Power Pack - Removal and Installation

CR 33-51-03 Emergency Power Pack - Adjustment and Test

CR 2. Adjustment/Test

CR NOTE: During this test do not electrically operate the
CR passenger doors.

CR NOTE: If the Emergency Lighting System Emergency Power Packs
CR are not to be tested, refer to "Emergency Power Pack -
CR Removal and Installation" (33-51-03) and remove the
CR Emergency Lighting System Emergency Power Packs (ten
CR each). After "Egress Power Supply - Adjustment Test" is
CR accomplished, reinstall the Emergency Lighting System
CR Emergency Power Packs. If Emergency Lighting System
CR Emergency Power Packs are to be tested, refer to
CR "Emergency Power Pack - Adjustment and Test" (33-51-03).

CR A. Functional Test

CR (1) Turn on electrical power (Ref. 24-00-00).

CR (2) On Flight Engineer/Second Officers (FE/SO) aft circuit
CR breaker panel CB3, Zone 215, verify that EMER LT CHARGE
CR SENSE (J6) circuit breaker is closed.

CR (3) On FE/SO aft circuit breaker panel CB3, Zone 215, open
CR and tag the EGRESS LT CHARGE (H1) circuit breaker.

CR (4) On eyebrow panel, Zone 210, place EMERGENCY LIGHTING
CR switch in Off position; verify that UNARM annunciator
CR light comes on.

CR (5) Place EMERGENCY LIGHTING switch in ARM position; verify
CR that UNARM annunciator light goes off.

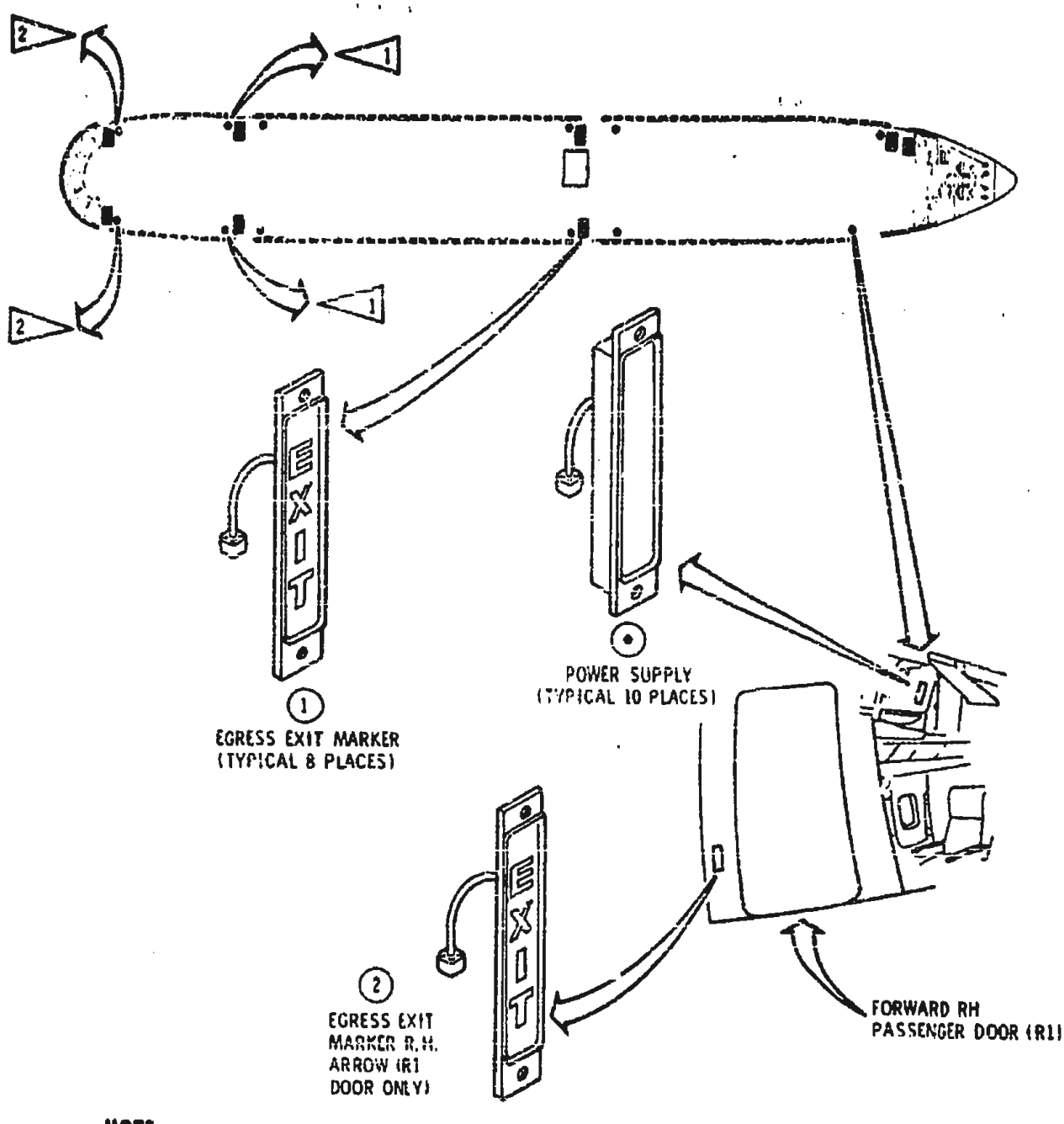
CR (6) Place EMERGENCY LIGHTING switch in ON position; verify
CR that all egress exit markers and egress aisle lighting
CR come on (Ref. Figure 501). Leave switch on for 10 (+1,
CR -0) minutes.

CR (7) Place EMERGENCY LIGHTING switch in OFF position; verify CR that all egress exit markers and egress aisle lighting CR go off.

CR (8) On FE/SO aft circuit breaker panel CB3, Zone 215, CR remove tag and close the EGRESS LT CHARGE (H1) circuit CR breaker.

CR (9) Allow egress power supplies to charge a minimum of four CR hours.

CR (10) Turn off electrical power (Ref. 24-00-00).



NOTE

1 ON AIRCRAFT 31032 THRU 31035 ONLY.

2 ON AIRCRAFT 11001 THRU 31031

M1-0000-33-5002

CR Egress Exit Marker, Egress Aisle Lighting and Power
CR Supply Locations
CR Figure 501 (Sheet 1 of 3)

R EFFECTIVITY: ALL
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001B

POWER SUPPLY NO. 3351-( )	POWER SUPPLY LOCATION	EGRESS EXIT MARKER NO. 3351-( )	EGRESS EXIT MARKER LOCATION	EGRESS AISLE LIGHTING LOCATION	EGRESS AISLE (CROSS-AISLE) LIGHTING LOCATION
PS9001	FORWARD LH PASSENGER DOOR (L1)	DS9001 AND DS9008	FORWARD LH PASSENGER DOOR (L1)	ZONE "A" LH AISLE	
PS9002	FORWARD RH PASSENGER DOOR (R1)	DS9009	FORWARD RH PASSENGER DOOR (R1)	ZONE "A" RH AISLE	AISLE BETWEEN PASSENGER DOORS (L1-R1)
PS9003	CENTER LH PASSENGER DOOR (L2) FORWARD			ZONE "C" LH AISLE	AISLE (LH) BETWEEN PASSENGER DOORS (L2-R2)
PS9004	CENTER RH PASSENGER DOOR (R2) FORWARD			ZONE "C" RH AISLE	AISLE (RH) BETWEEN PASSENGER DOORS (L2-R2)
PS9005	CENTER LH PASSENGER DOOR (L2) AFT	DS9010	CENTER LH PASSENGER DOOR (L2)	ZONE "D" LH AISLE-FORWARD	
PS9006	CENTER RH PASSENGER DOOR (R2) AFT	DS9011	CENTER RH PASSENGER DOOR (R2)	ZONE "D" RH AISLE-FORWARD	
PS9007	AFT LH PASSENGER DOOR (L3) FORWARD			ZONE "D" LH AISLE-AFT	AISLE (LH) BETWEEN PASSENGER DOORS (L3-R3)

1 ON AIRCRAFT 31032 THRU 31036 ONLY.

2 ON AIRCRAFT 11001 THRU 31031 ONLY.

M1-0000-33-5003

CR CR CR Egress Exit Marker, Egress Aisle Lighting and Power Supply Locations
Figure 501 (Sheet 2 of 3)

R EFFECTIVITY: ALL

001B

POWER SUPPLY NO. 3351-( )	POWER SUPPLY LOCATION	EGRESS EXIT NO. 3351-( )	EGRESS EXIT MARKER LOCATION	EGRESS AISLE LIGHTING LOCATION	EGRESS AISLE (CROSS-AISLE) LIGHTING LOCATION
PS9008	AFT RH PASSENGER DOOR (R3) FORWARD			ZONE "D" RH AISLE-AFT	AISLE (RH) BETWEEN PASSENGER DOORS (L3-R3)
PS9009	AFT LH PASSENGER DOOR (L3) AFT	DS9012 AND DS9014	AFT LH PASSENGER DOOR (L3) & AFT LH EMERGENCY DOOR (L4)	ZONE "E" LH AISLE	AISLE (LH) BETWEEN EMERGENCY DOORS (L4-R4)
PS9009	AFT LH PASSENGER DOOR (L4) FORWARD	DS9012 AND DS9014	AFT LH PASSENGER DOOR (L3) & AFT LH EMERGENCY DOOR (L4)	ZONE "E" LH AISLE	AISLE (LH) BETWEEN EMERGENCY DOORS (L4-R4)
PS9010	AFT RH PASSENGER DOOR (R3) AFT	DS9013 AND DS9015	AFT RH PASSENGER DOOR (R3) & AFT RH EMERGENCY DOOR (R4)	ZONE "E" RH AISLE	AISLE (RH) BETWEEN EMERGENCY DOORS (L4-R4)
PS9010	AFT RH PASSENGER DOOR (R4) FORWARD	DS9013 AND DS9015	AFT RH PASSENGER DOOR (R3) & AFT RH EMERGENCY DOOR (R4)	ZONE "E" RH AISLE	AISLE (RH) BETWEEN EMERGENCY DOORS (L4-R4)

ON AIRCRAFT 31032 THRU 31036 ONLY.

 ON AIRCRAFT 11001 THRU 31031 ONLY.

M1-0000-33-5004

CR Egress Exit Marker, Egress Aisle Lighting and Power
CR Supply Locations
CR Figure 501 (Sheet 3 of 3)

R EFFECTIVITY: ALL
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001B

CR EGRESS AISLE LIGHTING - REMOVAL AND INSTALLATION

CR 1. Referenced Procedure

CR MM 33-59-05 Egress Aisle Lighting Installation

CR WDM 33-59-01 Emergency Egress Lighting System

CR 2. Removal/Installation - Track Assembly

CR NOTE: Reference "Egress Aisle Lighting Installation" (MM
CR 33-59-05, Page 401) procedure and Figure 401.

CR A. Removal

CR (1) On eyebrow panel, Zone 210, place EMERGENCY LIGHTING
CR switch in the OFF position and tag.

CR (2) Separate egress aisle lighting track cover from track
CR bottom far enough to disconnect flex lead and flex
CR cable (if applicable) from flex cable assembly.
CR Reference Figure 401.

CR (3) Disconnect flex lead and flex cable (if applicable)
CR from flex cable assembly.

CR (4) Reinstall track cover on track bottom.

CR (5) Mark end points of track assembly on floor panels for
CR later use when reinstalling the track assembly.

CR (6) Remove track assembly (as one piece) from floor panel.

CR B. Installation

CR (1) Install polyethylene tape (1.5 inches wide), TWA Stock
CR Number 47-4531, over top of floor panels where track
CR assembly is to be installed. Install track assemmbly
CR on floor panels (over polyethylene tape) with two
CR layers of double faced tape, TWA Stock Number 52-0683.

CR NOTE: When installing light track assembly at edge of
CR floor panels and chair track, use alignment
CR tool, TWA Tool Number C03091-1, to obtain
CR correct spacing between chair track and light
CR track assembly.

C (2) Separate egress aisle lighting track cover from track
C bottom far enough to connect flex lead and flex cable
C (if applicable) to flex cable assembly (Ref. Figure
C 401).

C (3) Connect flex lead and flex cable (if applicable) to
C flex cable assembly.

C (4) Reinstall track cover on track bottom.

CR CAUTION: ASSURE TRACK COVER DOES NOT COVER THE LIGHTED
CR PORTION OF THE EGRESS LIGHTING TRACK.

CR (5) Visually check zone D and E outboard egress light track
CR installation to assure seat track cover does not cover
CR the lighted portion of the egress light track.

CR (5.1) Remove tag from EMERGENCY LIGHTING switch.

C (6) Test the Emergency Egress Lighting system per the
C Emergency Egress Lighting System, Operational Test
C (33-59-00).

C 3. Removal/Installation - Flex Lamps

C NOTE: Reference "Egress Aisle Lighting Installation" (MM
C 33-59-05, Page 401) procedure and Figure 401.

C A. Removal

C (1) On eyebrow panel, Zone 210, place EMERGENCY LIGHTING
C switch in the OFF position and tag.

C (2) Separate egress aisle lighting track cover from track
C bottom far enough to remove flex lamp. Reference
C Figure 401.

C (3) Disconnect flex lamp from flex cable assembly and
C remove flex lamp from track assembly.

C B. Installation

C (1) Connect flex lamp to flex cable assembly and install in
C track assembly. Reference Figure 401.

C (2) Reinstall track cover on track bottom.

C (3) Remove tag from EMERGENCY LIGHTING switch.

C (4) Test the Emergency Egress Lighting System per the
C Emergency Egress Lighting System, Operational Test
C (33-59-00).

C 4. Removal/Installation - Flex Cable Assembly

C NOTE: Reference "Egress Aisle Lighting Installation" (MM
C 33-59-05, Page 401) procedure and Figure 401.

C A. Removal

C (1) On eyebrow, Zone 210, place EMERGENCY LIGHTING switch
C in the OFF position and tag.

C (2) Remove egress aisle lighting track cover from track
C bottom. Reference Figure 401.

C (3) Disconnect flex lead and flex cable (if applicable)
C from flex cable assembly.

C (4) Disconnect flex lamps from flex cable assembly and
C remove flex lamps from track assembly.

C (5) Remove flex cable assembly from track bottom.

C B. Installation

C (1) Install flex cable assembly in track bottom using
C double faced tape, TWA Stock Number 52-0684. Reference
C Figure 401.

C (2) Connect flex lead and flex cable (if applicable) to
C flex cable assembly.

C (3) Connect flex lamps to flex cable assembly and install
C flex lamps in track assembly.

C (4) Install track cover on track bottom.

C (5) Remove tag from EMERGENCY LIGHTING switch.

C (6) Test the Emergency Egress Lighting System per the
C Emergency Egress Lighting System, Operational Test
C (33-59-00).

C 5. Removal/Installation - Flex Leads

C NOTE: Reference "Egress Aisle Lighting Installation" (MM
C 33-59-05, Page 401) procedure and Figure 401.

C A. Removal

C (1) On eyebrow panel, Zone 210, place EMERGENCY LIGHTING C switch in the OFF position and tag.

C (2) Remove sidewall grille to gain access to flex lead C connector.

C (3) Disconnect flex lead connector from aircraft connector.

C (4) Separate egress aisle lighting track cover from track C bottom far enough to disconnect flex lead from flex C cable assembly.

C (5) Disconnect flex lead from flex cable assembly and C remove flex lead.

C B. Installation

C (1) Connect flex lead to flex cable assembly. Reference C Figure 401.

C (2) Install track filler, TWA Stock Number 52-0428, in C chair tracks where flex lead crosses chair tracks.

C (3) Install one layer of polyethylene tape (1.5 inches C wide), TWA Stock Number 47-4531, on floor panels and C over chair track filler where flex lead is to be C installed. Install flex lead on floor panels (over C polyethylene tape) with one layer of double faced tape, C TWA Stock Number 52-0683. Install one layer of tape, C TWA Stock Number 47-1763, over top of flex lead. C Install one layer of polyethylene tape (3 inches long). C TWA Stock Number 47-4531, over flex lead where flex C lead crosses over chair tracks. Apply RTV 732 sealant, C TWA Stock Number 50-0924, to both sides of flex lead C where it passes under sidewall grille and where it C enters track bottom.

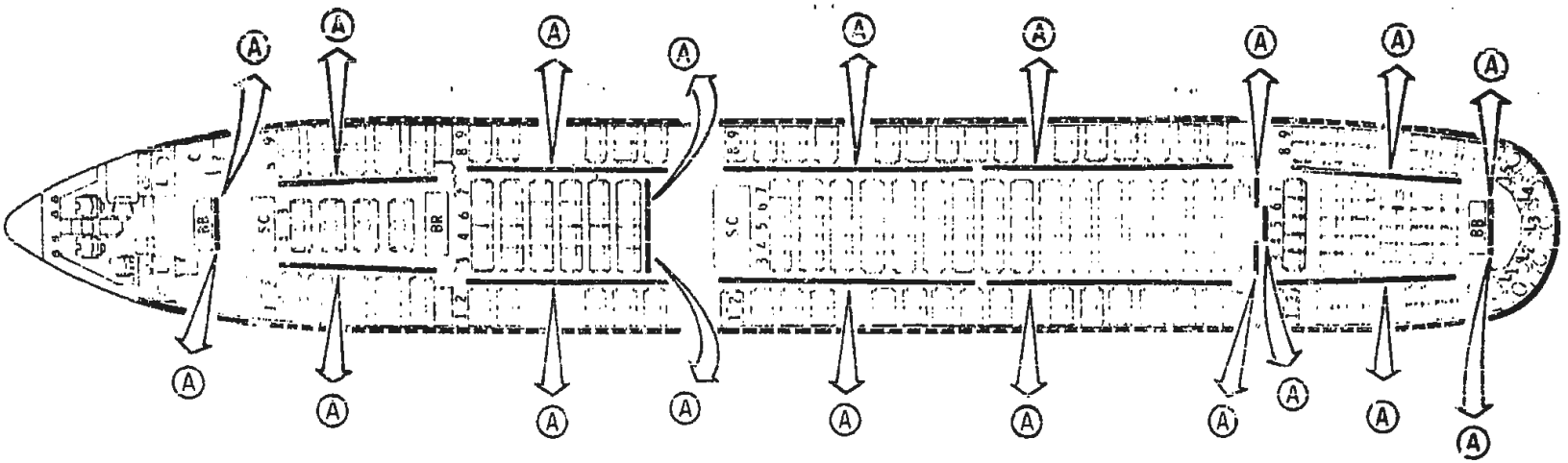
C NOTE: Rug tape should not be installed over or under C flex lead.

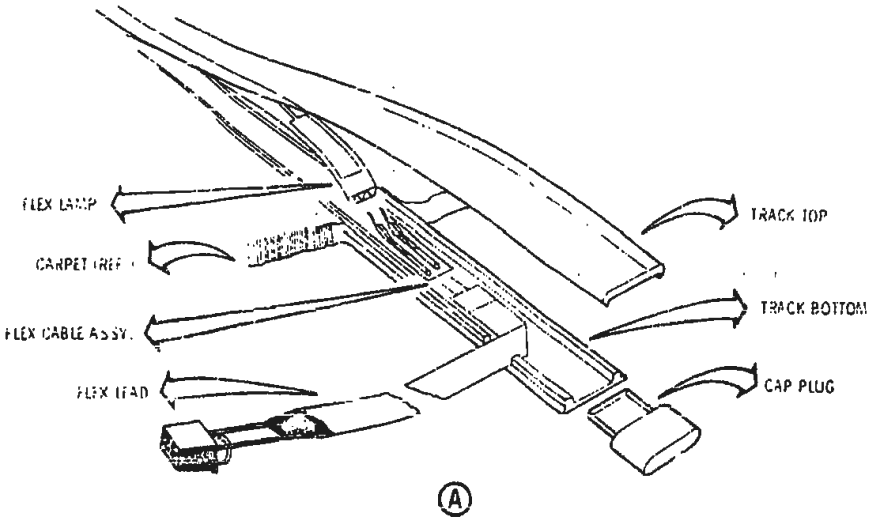
C (4) Reinstall track cover on track bottom.

C (5) Connect flex lead connector to aircraft connector.

C (6) Install sidewall grille over flex lead.

CR CAUTION: ASSURE TRACK COVER DOES NOT COVER THE LIGHTED CR PORTION OF THE EGRESS LIGHTING TRACK.





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C
C Egress Aisle Lighting
Figure 401

R EFFECTIVITY: ALL
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CR (7) Visually check zone D and E outboard egress light track
CR installation to assure seat track cover does not cover
CR the lighted portion of the egress light track.

CR (7.1) Remove tag from EMERGENCY LIGHTING switch.

C (8) Test the Emergency Egress Lighting System per the
C Emergency Egress Lighting System, Operational Test
C (33-59-00).

C 6. Removal/Installation - Flex Cables

C NOTE: Reference "Egress Aisle Lighting Installation" (MM
C 33-59-05, Page 401) procedure and Figure 401.

C A. Removal

C (1) On eyebrow panel, Zone 210, place EMERGENCY LIGHTING
C switch in the OFF position and tag.

C (2) Separate egress aisle lighting track covers from track
C bottoms far enough to disconnect flex cable from flex
C cable assemblies.

C (3) Disconnect flex cable from flex cable assemblies and
C remove flex cable.

C B. Installation

C (1) Install track filler, TWA Stock Number 52-0428, in
C chair tracks where flex cable crosses chair track.

C (2) Install one layer of polyethylene tape (1.5 inches
C wide), TWA Stock Number 47-4531, on floor panels and
C over chair track filler where flex lead is to be
C installed. Install flex lead on floor panel (over
C polyethylene tape) with one layer of double faced tape,
C TWA Stock Number 52-0683. Install one layer of tape,
C TWA Stock Number 47-1763, over top of flex cable.
C Install one layer of polyethylene tape (3 inches long),
C TWA Stock Number 47-4531, over flex cable where flex
C lead crosses over chair tracks.

C NOTE: Rug tape should not be installed over or under
C flex lead.

C (3) Connect flex cable to flex cable assemblies. Reference
C Figure 401.

C (4) Reinstall track covers on track bottoms.

C (5) Remove tag from EMERGENCY LIGHTING switch.

C (6) Test the Emergency Egress Lighting System per the
C Emergency Egress Lighting System, Operational Test
C (33-59-00).

CR **EGRESS AISLE LIGHTING INSTALLATION - REMOVAL AND INSTALLATION**

CR 1. **Referenced Procedures**

CR MM 33-59-04 Egress Aisle Lighting - Removal and Installation

CR WDM 33-59-01 Emergency Egress Lighting System

CR 2. **Installation**

CR A. The "Egress Aisle Lighting Installation" procedures are
CR located on the "Aircraft and Engine Maintenance Forms" film.
CR These procedures are shown on the following drawings:

CR (1) On L-1011-1 (TWA),

CR Installation procedure is shown on TWA Drawing GO2538,
CR Sheets 7 through 12.

CR (2) On L-1011-50/-100,

CR Installation procedure is shown on TWA Drawing GO2839,
CR Sheets 7 through 12.

CR (3) On L-1011-1 (2L-345 Configuration -5 STAR),

CR Installation procedure is shown on TWA Drawing GO2610,
CR Sheets 6 through 11.

CHAPTER 34

LIST OF EFFECTIVE TEMPORARY REVISIONS

FOLLOWING IS A COMPLETE LISTING OF ALL ACTIVE TEMPORARY REVISIONS (TR'S). TR'S NOT LISTED SHOULD BE REMOVED. THE ATA NUMBER, CONFIG CODE AND PAGE NUMBER IDENTIFIES THE PAGE PRECEDING THE TR.

TR NUMBER	ATA NUMBER	CONFIG CODE	PAGE NUMBER	TR DATE

NONE